

# CSC2011 PARTICIPANTS

**Jonathan AGUILAR**

**AGH University of Science and Technology, Krakow - Poland**



I am currently a Marie Curie fellow with the Marie Curie Initial Training Network on Particle Detectors (MC-PAD). My research involves simulation and prototype preparation and testing of the luminosity calorimeter (LumiCal) for the future International Linear Collider. I am also a MSc student at AGH University of Science and Technology in Krakow, Poland, where I study nuclear physics with a focus on HEP. I did my undergraduate studies in physics at Harvard University in Cambridge, USA. While there I worked in the laboratory of Prof. Robert M. Westervelt, developing nanoscale dielectrophoretic tweezers for atomic force microscopy. I became interested in computing for HEP when I wanted to move the LumiCal simulations to the local cluster computing facility. I program primarily in C++ and Python (for Geant4 and ROOT), and am currently learning web-oriented programming languages. I am also familiar with LabView.

**Irene ALONSO  
CANELLA**

**CERN, Geneva - Switzerland**



I am a MSc in Computer Science. I studied in Oviedo University and I finished my thesis in INRIA (loria) Enterprise in Nancy (France). I have been working at CERN since 2008. I have been working developing Java web applications using Java EE technologies such as Spring MVC, Ibatis, Apache Struts, Hibernate, Oracle and Groovy. I have also been developing Sharepoint sites, and C# tools. Currently I am working in the Cryogenic maintenance section, developing SAP applications with Oracle data base and I am involved in a Java project.

**Alejandro ALVAREZ  
AYLLON**

**CERN, Geneva - Switzerland**



The first time I arrived to CERN was as an Openlab Summer Student, in 2008. The next year I came back as a Technical Student, working for the former Grid Deployment group. I started doing testing of work elements at first, and storage later. After some time, I developed a framework to enable nightly builds and tests through ETICS, framework that is still at use and was presented at the 1<sup>st</sup> EMI Technical Conference in Vilnius. Finally, in November of 2010 I got the fellow position in the same group (now named Grid Technology), and started moving from testing to more development duties, although I am still maintaining the testing framework.

**Simone AMOROSO**

**Physikalisches Institut, Universität Freiburg - Germany**



After working in the CDF experiment during my master thesis I have started this year a PhD in Freiburg, working in the ATLAS SUSY group. I am currently involved in developing a general search strategy for new physics, looking at deviations from SM predictions in all possible event topologies, to minimize the chance of missing new phenomena. I am also taking part in an upgrade of the muon DCS. My preferred OS is a Debian Linux, but if obliged I not disdain working on Windows. I have extensive experience with C/C++ and the ROOT framework, and some knowledge of python, LabView and VHDL.

**Mariá ARSUAGA RÍOS****CETA-Ciemat, Cáceres-Spain**

I studied BSc Computing Engineer at the University of Murcia, Spain. She got two MSc. The first one was in Grid Computing and e-Engineering at Cranfield University, Bedfordshire, UK, in 2008. The second MSc was related to Information Technologies and Advanced Telematics at University of Murcia, Spain, in 2009. After her studies, she has been working on projects related to Data Mining, Ontology Systems, Bioinspired Algorithms and Optimization. She is currently doing her PhD in the institution CETA-Ciemat in collaboration with the University of Extremadura (Spain). Her PhD consists in researching different multi-objective strategies based on bioinspired algorithms to optimize the job scheduling problem in the Grid. In this first stage, she is using and modifying the simulator GridSim to evaluate the algorithms. At the same time, she is teaching artificial intelligence applied to grid environments in a MSc at the University of Extremadura, Spain. Also, she is taking part in "the Gridification Weeks" at the CETA-Ciemat that consist in helping researcher groups to port their applications into the Grid.

**Fu Kit Jay AU-YEUNG****The Chinese University of Hong-Kong – Hong-Kong**

I am currently a Computer Science master student in The Chinese University of Hong Kong. The focuses of my research are high dimensional data analysis and mathematical modeling. The research was working incorporating with PhD research team and the discrete maths model has been implemented for a DNA-Protein sequencing project. I was responsible for database modeling, maths model coding and testing. At the same time, I was developing a real-time statistical analysis solution for large data set based on grid or cloud computing architecture. For the system development, tools using mainly ROOT, Python, R, Matlab, SQL, C++ and C#.

**Mehdi BELHAY****CERN, Geneva - Switzerland**

After finishing my master degree in Computer science in September 2010 I joined CERN in October 2010 as a Volontaire International (Special Program of France - VIA). My current work at CERN consists in providing support and maintenance of all HR's internal Oracle Application Express applications that already exist, analyzing requirements for new applications that would be useful for the HR department and creating statistic reports. I mostly use PL/SQL, web languages (html, javascript, css) and the Business Object technology.

**Dario BERZANO****INFN & Università, Torino - Italy**

After obtaining a M.Sc. in Particle Physics at the University of Torino, Italy, in 2010 I worked for almost a year as a fellow for the CNRS (France) in two different laboratories (Subatech, Nantes and LPC, Clermont-Ferrand). Currently I am a Ph.D. student at the University and INFN, Torino. I work for the ALICE experiment since 2009 and starting from early 2010 I am actively involved in the definition and implementation of the data storage model for PROOF-based analysis facilities (AAF): this led to a dataset stager (afdsmgrd), that robustly transfers data upon request by taking into account network issues and files corruption, currently in production in all AAFs and distributed as a part of ROOT. I am also developing a cloud infrastructure in Torino based on OpenNebula, aimed to provide PROOF-based clusters on-the-fly running on dynamically-deployed virtual machines. My preferred working environments are Unix flavors, while my language skills cover mostly C/C++, Java, Ruby and Python.

**Claudia BORER****University of Bern - Switzerland**

I am a physics PhD student in my final year, having studied in Bern, Scotland, and Germany. I specialised in particle physics. Currently I am involved in the search for mini-black holes within the ATLAS experiment, using high-pT electrons. This work covers the generation of MC files, feasibility studies for a new analysis, and data analysis. The two years previously I was working in the DAQ part of the experiment, taking care of some of the computers involved, monitoring them, improving their performance, and testing new machines.

**Serkan BOZYIGIT****CERN, Geneva - Switzerland**

After a fun year as a technical student at CERN I finished my CS studies and worked in Zurich. Thereafter, I joined the software section of the beam instrumentation group at CERN in 2010. My current work involves writing and maintaining Java applications which are used by the LHC operation to test, calibrate and check beam instruments. Our section also writes applications for instrument experts, which usually involves writing on one hand a server application in C++ that communicates with the instrument and on the other hand a GUI to control it and analyse the gained data. I am as well working on the development of a framework (in Java & Maven) which is to be used by the members of our section to create dedicated expert applications.

**Ignas BUTENAS****CERN, Geneva - Switzerland**

Currently working in CERN, CMS experiment as facilities operator. Main tasks are to deploy and monitor critical services for CMS offline. Also as a member of HTTP group, I am responsible for the development of the tools for deployment and monitoring of the services and servers in our cluster. Mainly responsible for services running on cmsweb.cern.ch. Also I am involved in grid computing and deployment of the grid tools at CERN. Have strong knowledge in PHP, experience in Python and Bash scripting. Also have basics of C++. Mainly working on Mac OS X. Feeling comfortably with Linux and have experience with Linux system tools and Linux administration.

**Francesco CERVIGNI****INFN, Pisa - Italy**

I am a Computer Science student and I am currently designing and implementing the high level monitoring software components for the future FastTrack Processor used for tracking at Atlas, by collaborating with Istituto Nazionale di Fisica Nucleare in Pisa. Such software will be used to online monitor and control a big amount of new tracking hardware devices and integrate with the Atlas TDAQ. I use the programming languages C++, C, Python, Prolog, Erlang, Java and JavaScript and my biggest interests are in algorithms, programming techniques, efficiency and concurrency.

**Francois CHATAL****CERN, Geneva - Switzerland**

Coming from Bretagne (France), I have studied in France and Denmark. I came to CERN last October just after graduating; it was a great opportunity to work in an international environment. Presently I'm working as a VIA in the IT-DB group. My main task is to develop some tools to measure directly from inside the database the performance evolution when a change is brought to the hardware or software. This leads me to learn about Oracle's internals, database tuning and PL/SQL coding. Apart from that, I enjoy the Alpes' mountains during the winter to do skiing and snowboarding.



**Mihai CIUBANCAN****IFIN-Horia Hulubei National Institute of Physics and Nuclear Engineering, Bucharest - Romania**

I am working at National Institute of Physics and Nuclear Engineering Horia-Hulubei, Bucharest, Magurele in the IT and Particle Physics Department. I started my PhD thesis in October 2010. The thesis is dedicated to the study of the generation, storage and processing algorithms of the ATLAS data. I am the administrator of RO-07-NIPNE grid site with more than 1000 CPUs that supports ATLAS, ALICE and LHCb virtual organizations. I installed and configured an alien grid site at Bucharest for PANDA-GSI collaboration. I am also managing for Romanian ATLAS group an Analysis Facility, with a PROOF cluster and Athena software. I am currently working with Linux OS and python and C/C++ I am also one of the people responsible with the management of our network which includes configuration of routers and servers(email, named, web, DHCP)

**Mateusz DABROWSKI****CERN, Geneva - Switzerland**

I am on fifth year of studies at the Faculty of Physics, the University of Warsaw. Since September 2010 I has been on stage at CERN in BE-BI group. I am working on parameters' analysis of Beam Loss Monitoring system. My main task is to prepare tools for off-line diagnostic and reporting. Due to these reports it is possible to anticipate degradation in the system in advance and therefore to allow a high LHC machine availability. All of these I do using python language, SQL, Scipy libraries and ROOT.

**Cesare DELLE FRATTE****Max Plank Institute für Physik, München - Germany**

I am System Engineer and Manager for the computing project within the ATLAS group at Max Plank Institute für Physik in München. I am part of the team responsible of the Tier-2 grid computing center at the Rechenzentrum Garching (RZG). My main activities are installations and maintenance of the grid middleware, installation upgrading and maintenance of the storage Dcache system, and support the users from our ATLAS group and from the whole ATLAS collaboration. Previously I was working on the INFN-Roma2 Tier3 computing center after my Physic Degree at Università degli Studi di Roma Tor Vergata, and as database and web engineer the Auger cosmic ray experiment.

**Darren DEMICOLI****University of Malta, Msida - Malta**

Last year I finished my BSc in Computer Science and AI at the University of Malta. My main research area was reliable programming of decentralized distributed systems. Currently I work as a Linux/Unix system administrator and database administrator. My main responsibilities include deployment, configuration and management of servers (mainly RHEL4-6), as well as IBM Informix database administration which includes performing schema changes, configuration tuning, database backups/restores, replication and database storage maintenance. I also get a reasonable firsthand experience with server virtualization and various storage technologies including storage libraries and SAN's. My future plans include furthering my studies in computational science and performing research in a scientific computing domain.

**Zbyněk DRÁŠAL****Charles University Prague – Czech Republic**

I am a PhD student working on Belle & Belle II experiment at KEKB factory in Japan. At Belle, the main focus is on time-dependent CP violation measurements in B mesons decays, namely the determination of CP violation parameter  $\sin(2\beta)$ . The main contribution to Belle II experiment consists in software framework design & development: interface between EvtGen & Geant4, Geant4 implementation of Belle II tracker system, digitization software of pixel & strip detectors, pattern recognition. Furthermore, I have participated on the optimization studies of Belle II pixel detectors (DEPFET technology) & double-sided strip detectors. All the development has been performed under Linux operating system, utilizing MySQL databases, C, C++ and Python programming languages, CMake & Scons software & construction tools and ROOT system as analysis tool. Besides, I administrate Debian Linux servers.

**Agnieszka DUDZIAK****The Henryk Niewodniczanski Institute of Nuclear Physics Polish Academy of Science, Krakow - Poland**

I am a student of PhD studies at the Henryk Niewodniczanski Institute of Nuclear Physics PAS in Cracow. During my Master's Degree I developed expertise not only in different part of physics but also in computer modeling e.g. programming in C/C++ languages, evolutionary algorithms, neural networks and parallel and distributed computing. Moreover I am interested in Python programming language. Presently I am working in Cracow group of LHCb experiment. My research concentrates on exclusive decays of beauty hadrons. In particular, I am working on determining the unitarity triangle angle gamma with the study of B mesons. In free time I love play volleyball. I used to be professional player.

**Antonio FALABELLA****Università di Ferrara - Italy**

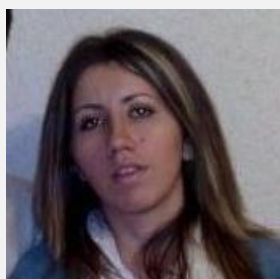
At this moment I am studying the performance and optimization of the B-flavour tagging algorithms. This allows the determination of tagging efficiency, a parameter that enters in any calculation of CP asymmetry measurements. Since last year I am also doing computing shifts at CERN. In this shifts I am required to monitor LHCb jobs on the Grid, data transfer from the experiment, MonteCarlo productions and data reconstruction. Operating systems: Windows Xp, Linux-based OS. Programming Language: C++, Python, Bash shell. Other software: ROOT, RooFit.

**Eike FRANK****University of Bern - Switzerland**

Currently, I am a PhD student at the University of Bern (Switzerland) in the field of neutrino physics. I studied physics at the University of Hamburg (Germany) and wrote my Diploma thesis about the OPERA neutrino oscillation experiment in 2007. I remained in the field and moved to Bern, where I have focused my work on the T2K experiment in Japan, which recently published its first results. My contributions to the experiment are the magnetic field mapping of the large size magnet of the near detector as well as the analysis of Delta++ production from neutrinos in the near detector.

**Raul GARCIA-MARTINEZ****CERN, Geneva - Switzerland**

I work developing specific software for Telecom group. I work mainly on maintaining and developing a system to manage and control the phone network at CERN, and as an internal incidents manager to my team and contacting external net operators. These projects are developed in a web application. In addition, I participate in various projects concerning the development and management of the CERN network. Currently I am working with windows 7 and Linux-ubuntu and I am a mac-os user. I also used to work with windows xp. Regarding programming languages, I work with Java (j2ee, jsp, xml) and pl/sql every day. I have also worked with c++ and c#, and in my years at university I used programming languages such as assembly, Haskell, prolog and CLisp, but my knowledge of these is limited.

**Raghida HAJJ****INFN, Legnaro - Italy**

I am an electronic and computer engineer. I also have a PHD from the university of Limoges in high frequencies electronics. Currently, I am working in the national institute of nuclear physics INFN on the project RareNoise in Padova, Italy. I write codes in c# for the data acquisition and data control using National instruments and programmable power supplies. I have also to create an interface between native codes created with c++ and c #. This will allow me to use c++ libraries based on ROOT for the storage of the data.

**Maciej Piotr KEPINSKI****CERN, Geneva - Switzerland**

I am a software developer with 3-year experience and strong background in Java and Oracle – originated technologies and tools. Previously I worked mainly as analyst and programmer at major insurance companies. Now, at CERN as a fellow at GSVASE group, I am responsible for obtaining requirements, developing and maintaining new system called TREC, which will be used to trace radioactive materials coming from the LHC tunnel. In the future this system will replace existing procedures and will be installed in all the LHC buffer zones. For development at CERN I am using PL\SQL, APEX and Java.

**Tatyana KHAN****KISTI, Daejeon – Republic of Korea**

I finished the Master program majoring in Computer Science at Yonsei University (Seoul, South Korea) in 2010 and joined as a researcher GSDC (Global Science experimental Data hub Center) team at KISTI. One of my currently assigned duties is support of Korea researchers involved in Belle experiment with KEK and data management. Another responsibility is operation management of KiAF (KISTI Analysis Farm) as a part of collaboration work with ALICE experiment. Since I started to work at KISTI my preferable operating system became Linux, though I keep using Windows as necessity from time to time. Mostly I work with bash or Python programming at the moment, but I have had some experience with C/C++, PHP, SQL and etc. as any other CS major.

**Igor KULAKOV****Johann Wolfgang Goethe-University Frankfurt - Germany**

I am currently working on my PhD in particle physics, mainly at the CBM experiment, but also had some tasks concerning the STAR experiment. Eventual goals are developing fast and efficient online event reconstruction and selection based on the STS and MVD detectors for the CBM experiment; developing fast and efficient track reconstruction for the STAR TPC detector, for offline and HLT. Also, in the future, I can be involved in track reconstruction for other experiments, such as ALICE, R3B and BELLE experiments. Up to now, I've worked with parallelization (SIMD, MIMD(TBB)) of SIMD KF track fit benchmark; parallelization and optimization (efficiency and time) of CBM STS CA track finder; SIMD-ization of CBM RICH ENN ring finder; implementation of ALICE HLT CA track finder algorithm for the STAR TPC and its optimization (efficiency and time).

**Martin LEITGAB****University of Illinois at Urbana-Champaign, Urbana - United States**

After a 'Magister' of physics at the University of Vienna in 2008, I started my studies as a PhD student in physics with the University of Illinois at Urbana-Champaign, USA. As my thesis work I have mainly been working on the extraction of charged hadron multiplicities from datasets collected by the Belle detector at KEK, Japan, which gave me experience in writing analysis modules in C++ on Scientific Linux, in utilizing batch job/LSF queues and c-shell scripts to harvest the Belle datasets and in using ROOT to analyze and display the extracted data. Since September 2010 I have also been involved in the 'Fast Muon Trigger' upgrade project at the PHENIX experiment at RHIC/Brookhaven National Laboratory, USA. My main tasks consist of hardware installation, operations software development, detector/trigger commissioning and raw data 'fast production', where I obtained basic experience in Perl, PostgreSQL and PHP. As my future work, I would like to apply computational methods and technologies to tackle medium to large scale problems of sustainability, disaster prevention or communication.

**David LOMIDZE****Institut für Physik, Johannes Gutenberg-Universität, Mainz - Germany**

Since February 2010 I work on PhD Degree at the Johannes Gutenberg University of Mainz. Mainly I work on form factor measurement of Ke3 decay channel using NA62 data of 2007 year run. I develop Moun Veto Detector (MUV1) for NA62 experiment, working on prototype tests and test data analysis. Created MYSQL based database for test data storage and online monitoring application for MUV1 testing processes. Previously (2004-2009) I worked at INFN di Napoli in collaboration with the CMS experiment. I was engaged in different tasks related to the muon trigger detector with Resistive Plate Chambers. Mainly I contributed in the development of the CMS RPC online and offline Data Quality Monitoring (DQM), which is dedicated to the real time studies of the detector and trigger performances with real event data. In addition worked on the design and test of the power system for the RPC. Developed online tools for automatic readout of the detector responses as function of high voltage and front end board threshold for final quality certification.



**Cinzia LUZZI****CERN, Geneva - Switzerland**

I am a PhD student of Computer Science at Ferrara University. I'm working on the AliEn project, a distributed Grid computing system developed and used in the context of the ALICE experiment. AliEn, is a production environment that implements several components of the Grid paradigm needed to simulate, reconstruct and analyze data in a distributed way. Currently, I am working on the integration of Parallel analysis facilities in AliEn, in order to allow physicists to analyze much larger datasets on a shorter time scale, allowing file analysis in a parallel way on remote computer clusters. The aim of my project is to integrate in AliEn a new framework named PoD (Proof on Demand), that allows users to use this parallel analysis facilities in a more user-friendly and convenient way, giving a dynamic cluster on request. The AliEn code is written mostly in Perl, but in the past I also had experience using C and C++. The project environment is SLC5.

**Bruno MAGALHAES****EPFL, Lausanne - Switzerland**

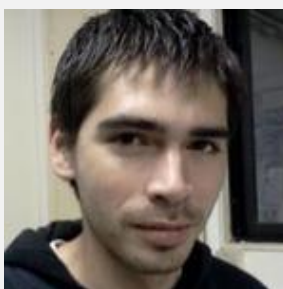
I am a software engineer for the Blue Gene (a 16000 computer cluster) at the Blue Brain Project: <http://bluebrain.epfl.ch/> I perform daily computation and analysis of parallel algorithms for neural structures and circuits. Using MPI, MPI/IO, Hdf5 and other parallel tools my main task is to increase efficiency and stability of the parallel systems. I assist other doctoral students and scientists in articles publishing, by providing them with the tools, statistics, and methods that can lead to better results: an example of such is a parallelization of a 3D volume (a neural circuit), by slicing all data into subvolumes (using regular and irregular slices) and providing each CPU with a slice, then gathering all results. I am highly skilled in C/C++, particularly in MPI and MPI IO. I have experience in Cuda and multi core programming across networks - my MSc specialization. I have good knowledge of Java and scripting languages eg Perl. I use ubuntu as daily OS for my tasks.

**Erekle MAGRADZE****II Physics Institute of Georg-August, University of Göttingen - Germany**

Currently I am working on my PhD thesis at II Physics Institute of Georg August University of Goettingen. My research interest is scientific computing with respect of data analysis using Fuzzy Sets Theory and Neural Networks also development of expert system for efficient GRID infrastructure monitoring. I am working on development and implementation of GRID sites automatic exclusion/inclusion system with ATLAS SSB team. For development of the system for ATLAS SSB I am using python2.6 and for expert system (Neural Networks and Fuzzy sets algorithms) mainly I code in java and using MatLab, also for monitoring of different issues on II Physics Institute tier2 center I am using bash shell environment for scripting and PHP as well. I have master's degree in computer science and 3 years experience as a system and network Administrator with more than 150 computers network (Headquarter and 5 branches) at a private company.

**Manuel MALO DE MOLINA MARTINEZ****CERN, Geneva - Switzerland**

Last year after finishing my Master Thesis on Computer Engineering at University of Oviedo (Spain) I came to CERN to work for IT-OIS Group as a Project Associate. I am part of the Web Services team, we provide the infrastructure and management tools for the hosting of websites in CERN. Currently my tasks include developing new tools for our web application to help the users manage their websites more efficiently, as well as keeping them secure controlling user access; upgrading our systems to keep up with the newest technologies; and managing our web hosting servers, both UNIX and Windows machines. For these I use mostly C#, ASP.NET, scripting languages and several web technologies. I also feel comfortable working with Java, Python and C++.

**Sebastián MANCILLA****Federico Santa María Technical University, Valparaíso - Chile**

I am an undergraduate student of Computer Science at Universidad Técnica Federico Santa María, in Valparaíso, Chile. In the last year I have been collaborating with HEP projects of the Physics department, and my current work is the development of data analysis applications for the CLAS detector at Jefferson Lab. For one side I am developing an API to implement a full analysis package with a simple interface to make easy write programs and use the data files. And the other parallel project is the implementation of the electro-calorimeter reconstruction using a service oriented approach and a framework developed by people of JLab. My thesis will be about the C++ implementation of the framework. I am familiar with C, C++, Java and Python, and I have advanced knowledge of the Linux operating system.

**Christos MARGIOLAS****ICS FORTH, University of Crete - Greece**

I am studying Computer Science at University of Crete and I am going to graduate after my internship at CERN. I work at PES group of Information Technology department and I am responsible for the design and implementation of a distributed modular service for system level resource monitoring. My interests are Multi-core Architectures and Parallel Computing, Computational Accelerator Programming (GPUs and CELL BE), Performance Analysis and Optimizations, System Runtimes and Compilers, Distributed systems. I am experienced with system level development on various architectures (x86, ARM, CELL BE, PowerPC). I have used Assembly(x86, CELL BE), C, C++, Python and Java for various projects needs.

**David MARTIN CLAVO****CERN, Geneva - Switzerland**

I am a software / web engineer currently working in the CERN Service Management Team as a Fellow in GS-SMS. My work consists mostly in technical aspects related to the Service-Now system at CERN. I am the main developer of the CERN Service Portal ( <http://cern.ch/service-portal> ). I am also involved in the Drupal "movement" at CERN (ENTICE), having developed <http://services.web.cern.ch> . Previously, I worked two years in the Indico team, where I integrated Indico with several collaboration tools (EVO, Vido...). Before that, I worked one year in NTT Data (Japan), contributing to the ActiveMQ Apache project. Given all of the above, my technical knowledge covers: HTML/CSS/Javascript, Python, Java, PHP, relational and object databases. My current interests are website design / usability, search engines, application performance, and security. I hope to learn more about some of these topics in the CSC.

**Manuel MARTIN MARQUEZ****CERN, Geneva - Switzerland**

I am a Doctoral Student in the Data Management section of the Beams department at CERN. My Ph.D. research activities are focused on the study of new parallel biomimetic approaches for non-linear and non-Gaussian time series forecasting, in order to detect in advance any malfunctioning of the LHC control system. I am also actively involved in many other projects related with the main activities of the DM section, some examples are: CCDB - Data-driven control configuration database system for the CERN accelerator complex. RBAC - System for managing authorization data for role-based access to the control equipment, (CERN and Fermilab collaboration project) and FESA - Framework for the LHC control software architecture, (CERN and GSI collaboration project). The different roles I have developed for the projects as mentioned, include: user requirements analysis and modeling; relational and XML database design, implementation and support; interface development - web interfaces.

**Javier MARTIN MONTULL****CERN, Geneva - Switzerland**

I had my first contact with CERN during the last year of my studies in Computer Science at Jaume I university (Spain) when I spent a year working as a technical student for the IT-UDS group. After obtaining my degree I returned with a fellowship position and I am currently working on the development of the INSPIRE services in collaboration with the other developers in GS-SIS-OA, IT-UDS-CDS and SLAC. Bringing INSPIRE from its current "beta" version into a full production system. The main task is to optimise and complete the toolset for the DB operators to ingest, classify and curate records. This is a crucial step to switch off the SPIRES system, where curation still happens, and fully deploy all operational resources in INSPIRE at the four libraries involved in the process (CERN, DESY, FNAL, SLAC). In my daily work I use Linux and the following programming languages: Python, Javascript, MySQL.

**Luca MASCETTI****CERN, Geneva - Switzerland**

I am currently a fellow at CERN in IT-DSS group. Here I'm working as system administrator on the new multi-petabyte EOS storage, an high reliability and high availability redundant diskpools used by ATALS and CMS. Here I developed and integrated the EOS diskserver setup into the Automatic Installation Management System in order to minimize the human intervention and I also specified different failure scenario for the system. I received my Master degree in Computer System Engineering in December 2010 at Politecnico di Milano, Italy with a thesis concerning the Green Traffic engineering where I developed optimization methods for energy savings in IP traffic engineering.



**Andrea MATTERA****Uppsala University - Sweden**

Last year (10/2010) I took my MSc in Physics at the University of Insubria (Italy), with a specialization in Medical Physics and a thesis dealing with Boron Neutron Capture Therapy applications. I am now pursuing a PhD in Applied Nuclear Physics at Uppsala University (Sweden). I will work in the measurement of neutron-induced fission yields of several actinides and at different neutron energies, to provide information to be used in future Gen-IV power plants or for the handling of Spent Nuclear Fuel. I am currently developing an analysis tool to perform the analysis of the data that will soon be collected at the IGISOL-JYFLTRAP facility in Jyväskylä (Finland).

**Piotr MORAWSKI****The Henryk Niewodniczanski Institute of Nuclear Physics Polish Academy of Science, Krakow - Poland**

I am currently working on my PhD thesis in The Henryk Niewodniczanski Institute of Nuclear Physics in Cracow. The main goal of thesis is the measurement of the CKM's gamma angle with tree-like diagrams. Besides my analysis I am also involve in developing primary vertex reconstruction package for the LHCb experiment. In my work, I mainly use the mix of C++ and Python, preferably under Linux environment.

**Piotr Pawel NIKIEL****CERN, Geneva - Switzerland**

I develop control and signal acquisition software for CERN Accelerators. My work is mostly focused on OASIS, ACCOR and FESA projects. I'm interested in real time systems, control systems, signal processing, electronics, but also in many other topics. After hours I enjoy making music and doing some sports. Previously I worked at CERN in TOTEM and ATLAS experiments. I come from Krakow, Poland.

**Michal NOWOTKA****CERN, Geneva - Switzerland**

I graduated from the Warsaw University of Technology with a bachelor's degree in Computer Science, and am studying towards a master's degree in Computer Science. Presently I'm working on web applications for monitoring grid services and providing global real time visualization of the computing resources held by the LHC experiments on the WLCG infrastructure. I have prior experience with Linux, C++, bioinformatics and Artificial Intelligence. I'm also very interested in web frameworks and open web standards.

**Elena OLIVIER GARCÍA****Instituto de Física Corpuscular, Valencia - Spain**

I am Elena and I started my PhD in 2007 at IFIC, Valencia. I'm working in ttbar resonances for Beyond standard model in the ATLAS experiment which is at CERN. Also, I am working in the ATLAS Spanish Tier-2 as a member of the User Support IFIC helping with the Grid tools. Moreover, I do shifts in the Distributed Analysis Team Support and Computing at Point One for ATLAS. I hope to finish my PhD in the near future.

**Pablo PERA MIRA****CERN, Geneva - Switzerland**

I am a software engineer working for the controls group at CERN. We develop the software that the operators in the Control Center use to operate the accelerator complex. Before coming to CERN, I spent some time doing research multi-espectral image analysis in the Technical University of Valencia, Spain, and also worked for Google, in Zurich, in the Google Base team. I happened to be there when they launched Android, and I've been developing (and launching) Android applications since then. I had already explored a bit the mobile development world via Java ME on MIDP while I was studying in the KTH, Stockholm, where I stayed for a year. I am originally from Spain, and looking forward to make the best out of CSC.

**Antonio PEREZ PEREZ****CERN, Geneva - Switzerland**

I arrived last year as a Technical Student and was working on the CERN Computer Security Team. After one year and finishing my studies, I got a Fellowship and I'm currently working in the same team as software developer, sysadmin and computer security analyst. I'm always eager to learn new stuff, I dig trying new technologies, love my day-to-day work and I consider myself a Free Software enthusiast. My preferred development languages are Python, shell scripting and C++. I've done also web development (Django mostly and PHP) and I'm quite experienced on Linux internals and its system architecture.

**Francesco PERFETTO****Università degli Studi di Napoli "Federico II", Napoli - Italy**

After spending two years at University of Roma "La Sapienza" in Na62 experiment, actually I'm working at University of Naples "Federico II" in the WARp experiment. The experiment is dedicated to the search and to the study of galactic Dark Matter in the form of WIMPs (Weakly Interacting Massive Particles). In particular my work concerns more aspects: test on photomultiplier tube (PMT), I am testing the PMT Hamamatsu R11065, at different temperature (room and cryogenic) to characterize them; study on the optical properties of the liquid scintillator (Argon) and last but not least physics data analysis on data that we have got in which I use the ROOT framework. I am familiar with the following operating systems: Unix, Linux, OSX and with following programming languages: Fortran, C, C++. I also have basic knowledge of Perl and bash scripting. I expect from my participation at the CSC Cern School to improve my knowledge on ROOT -oriented data analysis- and the optimized use of computing resources.

**Piotr PRACZYK****CERN, Geneva - Switzerland**

I have finished master studies in mathematics (University of Warsaw) and in Computer Science (joint programme between University of Warsaw and Vrije Universiteit in Amsterdam). Since my highschool I worked as a programmer in several IT companies ( [lefthand.pl](http://lefthand.pl) , [p2ware.com](http://p2ware.com) and [hyves.nl](http://hyves.nl) ). In 2008 I came as a summer student and in June 2009 I started as a technical student at CERN. Since September 2010 I am working as a PhD student. My project aims at providing infrastructure for managing and searching for figures from scientific publications. I am working with the Inspire project.

**Daniela REMENSKA****NIKHEF, Amsterdam - Netherlands**

I received a PDEng degree in software technology from Stan Ackermans' School of Technological Design at TU/e in Eindhoven. I carried out my final software design project on the topic of Optimization of Large Scale HEP Data Analysis at NIKHEF, which has to do with efficient access to WLCG data from a local Tier-2 cluster. I'm currently involved in improving the overall data management on the Large Hadron Collider Computing Grid, as an LHCb liaison at the Physics Data Processing department of NIKHEF. My daily activities also include maintenance of a stager subsystem of the DIRAC community Grid solution used by the LHCb experiment. My current research interests as a PhD student at the Free University of Amsterdam revolve around formal methods for specifying and analyzing the behavior of distributed systems. I feel comfortable working with C++, Python, Java, both under Linux and Windows.

**Bartolomeu Andre  
RODRIGUES  
FERNANDES RABACAL**

**CERN, Geneva - Switzerland**



I am the responsible for the Data Quality Monitoring software as a fellow currently working at the PH-AID-DA group. I develop the ALICE DQM software package AMORE (Automatic MONitoring Environment) that gathers the online data collected by the several detectors of the ALICE Experiment which is then analysed by user defined algorithms provided by the detector teams and finally stores this monitoring information and allows its visualization. I also provide the needed user support to the teams of these detectors. I am familiar with Windows and Linux operating systems and familiar with C, C++, R, Mathematica and Matlab programming languages.

**Will ROGERS**

**STFC, Rutherford Appleton Laboratory, Didcot – United Kingdom**



I did an MSci in physics at Cambridge before taking a year to travel. I then started work at STFC near Oxford in the e-Science department. I am currently working on two projects. One is APEL, the grid accounting system used by EGEE and EGI. I am working on developing a new version of the system in Python. The second involves collecting data from scientific experiments including ISIS, a particle accelerator. My project is to collect data from different sources including Microsoft Sharepoint and Oracle databases, and prepare the storage database for the experimental data. I have got two years' experience programming in Java and Python on Linux and I am currently gaining experience programming C# in a Windows environment. I also like playing many different sports and doing puzzles.

**Mehmet Ozgur SAHIN**

**Middle East Technical University, Ankara - Turkey**



I am a Physics MSc Student at Middle East Technical University, currently working on analysis of Forward Backward Asymmetry in CMS experiment. I was a CERN summer student last year and I worked on Gamma background events in LCD- CLIC Design Group. I have great enthusiasm for programming and learning computational techniques. I have four years of experience on C++, C, Python and now I am also learning VHDL for programming FPGAs. Lastly, I love swimming and I am open to any swimming competition during the school!

**Sandra SAORNIL  
GAMARRA**

**Universität Zürich - Switzerland**



I am an Electronics Engineer surrounded by Physicists. I started working at LHCb a year ago, as the control expert for IT and TT sub-detectors. Sure, my background and my job do not involve a lot of computing, but working at CERN I really felt the need to learn more about it so I can contribute a bit more.

**Elvin Alin SINDRILARU**

**CERN, Geneva - Switzerland**



I am a fellow within the IT Department at CERN, in the Data and Storage Services Group. I am also closely working with the ROOT team for enhancing the functionality of the ROOT Framework used for high-physics data analysis. My interests lie in fields of data management and fault tolerance at workflow, file or file-system level. The main project that I am working on is called EOS and integrates various new concepts related to virtualization and state-of-the-art file transfer protocols like xroot. I graduated my master degree in Advance Computing from Imperial College London and I take particular interest in complex systems and mathematical modelling. The main programming language that I am currently using is C/C++, but I also have experience with Java and scripting languages such as Python and bash. I am comfortable using most common operating systems (Linux distributions, Windows and MacOS) and I am familiar with PHP, JavaScript and PL/SQL.



**Vijay Kartik SUBBIAH****CERN, Geneva - Switzerland**

I am a fellow with the Online group in the LHCb experiment at CERN. I am currently working on designing and developing benchmarking tools for measurements on the 1500-node High Level Trigger (HLT) farm. I am also involved in the support and administration of the computing backbone for LHCb. Over the next months, my focus will be on evaluating different distributed file-systems, and provide comparisons and test results to enable a decision to modify the storage framework at LHCb. I am comfortable with C/C++ and Python, and prefer working in a Linux environment. I graduated in Electrical Engineering and lean towards working on topics in signal processing and stochastic analysis.

**Pavlo SVIRIN****National Technical University of Ukraine, Kyiv - Ukraine**

Graduated from National Technical University of Ukraine "Kyiv Polytechnical Institute", faculty of Electronics, CAD department. Currently I work on my Ph.D. thesis. I study load balancing algorithms for Nordugrid ARC middleware and develop the one that will operate in Ukrainian GRID environment. I've got experience in programming using languages like C/C++, Java, PHP, PERL, SQL, Python and operational systems like MS Windows, FreeBSD, Linux and Mac OS.

**Nicola TAROCCO****CERN, Geneva - Switzerland**

I am currently studying to finish the master degree in Computer Science at the University of Udine, Italy. I'm working as Technical Student in IT-UDS-AVC section as project leader of the open source software Micala, a tool to record, process and publish web lectures. The growing amount of talks and meetings per day at CERN needs automatic, reliable and powerful software to process them. The software is written mainly in Python, with MySQL and Flash Action Script and is designed to be os and architecture independent. It is also intergrated with Indico, CDS Invenio and MediaArchive. I also have programming experience in Java, C#, PHP and web technologies.

**Mario UBEDA GARCIA****CERN, Geneva - Switzerland**

Before graduating at the end of 2010 as MsC Telecommunication Engineering ( accredited by ABET ) by ETSIT-UPM ( Madrid ) and MsC Software Engineering of Distributed Systems by IT-KTH ( Stockholm ) I have been working on my final thesis as a Technical Student in IT, more specifically at ES-VO section ( Experiment Support - VO Operations & Services ). I was focused on the extension of HammerCloud, a stress-testing system to commission grid sites for distributed activities, for CMS and LHCb VOs. Nowadays, I am working as a Junior Fellow on PH/LBC since February 2011. I am currently a developer of DIRAC and LHCbDIRAC, being DIRAC (Distributed Infrastructure with Remote Agent Control ) project a complete Grid solution for a community of users needing access to dsitributed resources, in this case, LHCb is the community.

**Dmitry USTYUSHKIN****CERN, Geneva - Switzerland**

I started working at CERN in April 2007 as Java developer for CERN EDH system, then starting from 2008 till end of 2010 I worked in IT-DB group, my main area of responsibility was middleware infrastructure for CERN administrative applications, which include running and development for Java Middleware like Apache Tomcat, Oracle iAS and Weblogic Application Servers, as well as for Apache HTTP servers, all deployed to Linux OS. For development and administration we used mostly Perl, Python, Java and Unix Shell. Starting from end of 2010 I work in CERN IT-CF group. I work on CDB, system which manages configurations of hardware installed in CERN Computer Centre, it uses Oracle RDBMS for storing data and Perl and Python for its business logic. I also work on Cluman, an application for managing and visualizing large scale clusters, which also uses Python, Java and Oracle RDBMS.

**Alice ZIMMERMANN**

**Physikalisches Institut Heidelberg - Germany**



I first visited CERN 2007 to work as scientific assistant at the COMPASS Experiment. My main task had been to help building a multiplicity counter for the COMPASS Spectrometer. Also in my diploma thesis I worked on constructing detectors and i build a Triggerhodoskop as an upgrade of the COMPASS Triggersystem. This year in February (2011) i started my doctoral thesis at the PI in Heidelberg. In contrast to my previous work on experimental hardware I am now doing data analysis at the ALICE LHC Experiment. Therefore it is necessary to have good knowledge in C++ computing and AliRoot, the analysis framework of ALICE. For my future work it is planned to analyse PbPb collisions, especially identification of strange particles in Jets.

**Maksym ZYZAK**

**Goethe-Universität Frankfurt**



Currently, I am doing my PhD in particle physics. I am involved into the development of fast and highly parallelized algorithms for the CBM experiment at FAIR: fast track finding, fast track fitting, short-lived particles reconstruction and selection. Also I participated in the development of the fast track reconstruction in the TPC detector of the STAR experiment at RHIC based on the Cellular Automaton method, in the development of the KFParticle package for the ALICE experiment. In my programs I use vectorization (based on SIMD instructions set) and parallelization between cores of CPU.