CSC2014 PARTICIPANTS

GARCIA ARZA Griselda



CERN, Geneva - Switzerland

I studied BSc, MSc and Pre-Doctoral MSc in Computer Science at the University of Oviedo in Spain. Currently, I work at CERN as software engineer and I am involved in two main projects: - EDMS6 (Engineering & Equipment Data Management Service), which stores the technical documentation of CERN and the LHC.-JMT (Job Management Toolkit) which is a web application used to manage the invoicing of jobs outsourced to a number of contractors working on the CERN site. I do programming mostly in Java, GWT, Spring and PL/SQL and I actively participate in the design of new features for both applications.

GARCIA FERRERO Juan



HEPHY, Vienna - Austria

24 year-old Spanish Industrial Engineer and Physicist. Master thesis dealt with topantitop cross section in CMS, in IFCA, Santander, 2013. Currently, I am pursuing my PhD in HEPHY, Vienna, involved in the assembly, testing and commissioning of the silicon vertex detector for Belle II.

GLASER Fabian



University of Göttingen - Germany

I received my master degree in Applied Computer Science in 2013 from the University of Göttingen in Germany. In my master project, I investigated how data analysis tasks from the LHCb experiment can be solved with MapReduce on a Cloud Computing infrastructure. Currently, I am conducting my PhD studies at the University of Göttingen in scope of a project, where we investigate how scientific applications can be ported to Cloud platforms in a broader scope. Data analysis from the ATLAS experiment is one of our main case studies. I enjoy working in multidisciplinary and international environments and spent two terms of my master studies at the University of Iceland. Regarding technical knowledge, I am most familiar with Linux-based operating systems, especially with Debian-based distributions and have programming skills in C/C++, Java and bash scripting. Recently, I also started with programming in Python.

HAITZ Dominik



Karlsruhe Institute of Technology - Germany

I am a PhD student at Karlsruhe Institute of Technology. The main focus of my work is physics, where I am working on the double-differential cross-section measurement of Z boson production in the electron decay channel. For the past two years I have also been responsible for determining the data-driven jet energy corrections in the Z->mumu channel. I have made major contributions to the common software frameworks (in python and C++) used in HEP data analyses at KITAdditionally; I have a strong interest in computing. I have contributed to the development of WLCG job submission software and I am administrator of the local GlideIn-WMS installation at KIT. My technical expertise comprises Linux (SLC, Ubuntu), bash, C++, python and ROOT.

HARTMANN Helvi



Frankfurt Institute for Advanced Studies - Germany

I am a PhD student at the Frankfurt Institute of Advanced Studies of the Goethe University Frankfurt in the Group of Prof. Lindenstruth.

The title of my PhD thesis is "CBM FLES Timeslice Building based on MPI". The data of the Compressed Baryonic Matter (CBM) experiment currently being built at FAIR---GSI is collected by the First---level Event Selector (FLES) and stored in Timeslices. To do so, the FLES Timeslice building has to combine data from all input links to time intervals and distribute them via a high---performance network to the compute nodes.

My task is to carry out the data distribution in high level software using MPI (Message Passing Interface). For this purpose I have to be trained using C++, bash scripting and Python for data analyzing.

HASEITL Rainer



GSI Helmholtzzentrum für Schwerionenforschung GmbH, Helmholtz - Germany

I am a computer scientist and working at the GSI in Darmstadt/Germany since 2007. I develop software in the beam instrumentation group to control accelerator devices like high voltage power supplies or programmable logic controllers (PLCs). Moreover I am involved in image processing systems e.g. for the camera readout of scintillator screens or Beam Induced Fluorescence (BIF) monitors. I am mainly programming in C++ and Java and used the Qt framework in several projects.

On the GSI campus, the construction of several new accelerators has begun - the FAIR project (Facility for Antiproton and Ion Research). My colleagues and me are testing several frameworks (e.g. FESA and IEPLC by CERN), applications and programming paradigms if they fit into the future FAIR control system.

JOVICEVIC Jelena



CERN, Geneva - Switzerland

During the past three years of my PhD studies within the KTH ATLAS group, I have been involved in the Higgs to WW analysis (HWW) and contributing to the b-jet identification algorithms and the Liquid Argon (LAr) ECAL team. I have experience in various aspects of the HWW analysis: from the sample production on the Grid to the study of the analysis performance and statistical interpretation of results. A part of my expertise also lies in development of the background estimation methods. In particular I was studying the top quark background in analysis with 1 jet and Z/Drell-Yan processes. I was developing a tool to reduce the top background in the WW control region using the MVA technique. In the ATLAS flavour tagging group, I work on calibration of the b-jet identification algorithms using the likelihood based approach. Within the LAr ECAM team, I performed an optimisation of the thresholds used to check the stability of the electronics calibration constants in the LAr calorimeter.

KALOGEROPOULOS Anastasios



CERN, Geneva - Switzerland

I am a master student in Computer Science at the Department of Informatics and Telecommunications at the University of Athens. Before that, in 2013 I obtained my B.Sc degree at the same university. The main objective of my bachelor thesis was to develop a cloud programming pattern for iterative computations in F#. During my studies I have used many programming languages, mainly C/C++,Java but I am also familiar with Python,HTLM,PHP,SQL. Currently I am doing a one year internship as a technical student in the Beams (BE) department, Beam Instrumentation (BI) group at CERN. My task is to develop graphical user interfaces in Java in combination with real-time acquisition software in C+++ for the beam loss measurement system in CERN's injectors.

KOWALEWSKA Anna Bozena



H. Niewodniczański Institute of Nuclear Physics, Krakow - Poland

About ten years ago I was inspired by lives of three people: Maria Sklodowska-Curie, Michael Faraday and Richard P. Feynman. This inspiration helped me in coming back to my dreams and after graduating in Law I was able to completely change the _eld and obtain M.Sc. Degree in Physics with very good results.

My research interests are centred on experimental particle physics. I have worked previously on the kaon and meson phi physics (experiments CBM and KLOE) and currently I am working for the ATLAS collaboration. I focus on searches of the charged Higgs boson, in the tau and neutrino _nal state with a hadronically decay of tau lepton. The experimental observation of charged Higgs bosons, which are predicted by many models with an extended Higgs sector, would indicate physics beyond the Standard Model

KUEHN Eileen



Karlsruhe Institute of Technology - Germany

I graduated as an engineer of computer science in 2009 from the University of Applied Sciences (HTW) Berlin. I was part of a research project at HTW where I worked on position and context-aware services using active and passive RFID technologies. From 2011 to 2013 I worked as a project manager to build a wireless transfer and development center in Berlin.

Since then I am a PhD researcher in computer science at Karlsruhe Institute of Technology. My work covers the development and improvement of a monitoring tool for tracking data flows of individual high energy physics grid jobs of the WLCG at the GridKa Tier-1 center. An important part is the analysis of collected data for discovering, understanding and finally categorizing communication and job patterns. This work is the basis for future developments of an automated approach for anomaly detection of grid jobs.

LÉCZ Zsolt



ELI-ALPS, Szeged - Hungary

I am 28 years old, not married and no children. I graduated in 2010 at the University of Cluj Napoca (Kolozsvar), Romania. My profile was Physics and Informatics, therefore beside theoretical physics I got a pretty strong education in several programming languages. Unfortunately I could apply this knowledge only during my master study (in 2009), when I was working on a particle tracking code written in C++. I have minor experience in Java, Assembly, Fortran and HTML as well. I received the PhD degree in laser and plasma physics at TU Darmstadt, Germany, in October, 2013. In February, 2014 I joined the theoretical plasma physics group of ELI-ALPS as junior scientist. As I am doing mostly numerical modelling and laser-plasma simulations, I am in strong interaction with the IT department and I need to know as much as possible about the computational environment. I think this summer school will be very useful for understanding the different parallel computing possibilities at our institute.

LINARES GARCIA Luis Emiro



Universidad de los Andes, Bogota - Colombia

Physicist and Electronics Engineer by training, I am currently working on computing operations for The CMS Collaboration, on aspects of distribution of jobs and detector conditions data all over the Grid. Before coming to CERN, I was designing hardware (and complementary software) for a company specialized in geological studies on demand. When out of office, my interests on computing lean towards massively parallel architectures for High Performance Computing (i.e. GPUs and FPGAs), interactive data visualization (both web- and desktop-based), and scalability-oriented algorithms. On the hardware side, I have interests in sensor fusion for robotics, power converters and electromagnetics simulation. When not working, I like to spend time with family and friends visiting the countryside, swimming and a little of martial arts.

LIONETTO Federica



University of Zurich - Switzerland

I hold a MSc degree in physics from University of Pisa (Italy). I specialized in highenergy physics, graduating with top marks in July. While at university, I had the opportunity to spend several months abroad, working as a summer student first for the CDF experiment at FNAL, in the US, where I participated in the data analysis activities on rare B_c⁰ meson decays, and then for the NA62 experiment at CERN, where I was involved in a project aiming at demonstrating that parallel computing can be used at trigger level in high-energy physics experiments. I further developed my interests in both heavy-flavor physics and trigger systems while working as a technical student for the LHCb experiment at LHC, where I investigated how to improve the online selection of hadronic heavy-flavor decays. I also devoted a part of my free time to outreach, working for INFN, CERN, and the municipality of Pisa. I am now a PhD student of the University of Zurich (Switzerland) and I am working for the LHCb experiment, focusing on R&D activities on silicon mi- crostrip sensors in view of the upgrade of the tracking system. I am characteris- ing the performances, in terms of charge sharing and charge collection efficiency, of sensors with different geometries. Inefficiency in the charge collection has been observed in a previous measurement on current sensors and may be nonnegligible for the new ones, so a detailed study is necessary before the design of the sensors is finalised. As a part of my PhD studies, I will also work on data analysis and on the detector control system, whose supervision level is based on the WinCC-OA SCADA system.

MARI ROMERO Antonio



Polytechnic University of Valencia - Spain

Currently. I am leading and participating in architecture definition of each computing part of the NEXT experiment: storage, processing, analysis, monitoring and distribution system. I am in charge of the configuration, administration and maintenance a farm of computers for the data acquisition system with Scientific Linux. I am working in the setup and evaluation the performance of several distributed file systems like Guslter FS, Lustre FS and Ceph FS. Developing and testing scripts to use multicore technology and administration the analysis batch system with Torque/Maui.

MARTINA Stefano



CERN, Geneva - Switzerland

I am actually a technical student at CERN in Physics department, I have a Bachelor of computer science at Florence University and I am studying for getting a Master degree. Before coming at CERN I had already work experience in the field of web programming, ERP, NLP and ontologies. I work on software written in C++ called TkLayout that is placed in an early developing stage of the new trackers of CMS experiment. It build the geometry of the tracker starting from certain parameters using symmetry in phy, also make performance analysis using statistical inference instead of simulations, like for instance calculating error propagation through modules. The idea is of developing an instrument that physicists can use for getting rapid information for testing new ideas; anyway TkLayout is capable of giving as output the geometry in a format that is feedable to the CMSSW framework for detailed Monte Carlo simulations.

MILIOU Ioanna



National Technical University of Athens - Greece

I recently graduated from the National Technical University of Athens as an Electrical and Computer Engineer. My diploma thesis title was "Tag recommendation for images of Flickr based on their spatial location", and deals with extracting information from the Flickr image database and applies novel recommendation techniques for recommending tags that involve the spatial and textual information of the images. Based on my diploma thesis we will publish a paper on DEXA Conference 2014 with the title "Location-aware Tag Recommendations for Flickr". I am currently working as a Software Developer in a Greek industry of Information Technology and Services. My interests include areas like information retrieval, data mining and big databases in which I am currently searching for a PhD.

MOHAMED Hristo



CERN, Geneva - Switzerland

I am currently a technical student in LHCb, working in the online team. I am highly interested in the in the DevOps world, for it combines the good sides of both the operations and development area. I am heavily interested in automatization and scripting and believe that Puppet is superior to normal scriping in controlling the process of automatization. I mainly script in bash/python/ruby, bug am also familiar with java and C++.

Another area I am highly interested in is security, as I believe it is highly neglected by the majority of people, but still a very important area in computing.