

Ozgur Altinok

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- Software Developer for High Energy Physics Data Analysis and Simulations
- Designing, implementing and maintaining technical computing tools (both API and GUI) for 4+ years
- Providing support for Linux-based systems used in MINERvA Experiment for Online Data Processing
- Expert Knowledge on MATLAB, C++ and ROOT(High Energy Physics Data Analysis Framework)
- Member of two major International High Energy Physics Collaborations: OPERA and MINERvA Experiments

EXPERIENCE

MINERvA: Neutrino Scattering Experiment

Graduate Research Assistant (2011 - Present)

Tufts University – Medford, MA

- Designed and maintained a MATLAB toolbox with GUI, simulating neutrino oscillations in high energy physics
- Developed a high statistics data analysis package in C++ for MINERvA Analysis Framework
- Optimized an existing algorithm in C++ that uses grid computing for reconstructing particle tracks from data
- Provided thorough documentation for MINERvA Analysis Framework

Nearline and Control Station Expert (2013 - Present)

Fermi National Accelerator Laboratory – Batavia, IL

- Expert Support for Nearline Machines used in online data processing and Control Stations
- Built on-site and remote Control Stations for MINERvA Detector at Fermilab and Tufts University
- Implemented new features on Control Stations for more user-friendly interface

OPERA: Neutrino Oscillation Experiment

Graduate Research Assistant (2009 - 2011)

Middle East Technical University – Ankara, Turkey

- Assembled and maintained a High Speed Microscope used for detecting particle tracks inside emulsion films
- Lead and trained a team of 5 involved in building the First Emulsion Scanning Laboratory in Turkey

Visiting Research Collaborator (Summer 2009 and Summer 2010)

Gran Sasso National Laboratory – L'Aquila, Italy

- Worked with a team of scientists and engineers at the largest emulsion scanning laboratory in Europe

Visiting Research Collaborator (May 2010)

Joint Institute of Nuclear Research – Dubna, Russia

- Guided Dubna Team about constructing an Emulsion Refreshing Chamber

EDUCATION

Tufts University

Medford, MA

Doctor of Philosophy in Physics, 2016 (Expected)

Master of Science in Physics, 2014

Middle East Technical University

Ankara, Turkey

Master of Science in Physics, 2011

▪ M.S. Thesis: High-Speed Automatic Scanning System for Emulsion Analysis in the OPERA Experiment

Bachelor of Science in Physics, 2009

▪ B.S. Thesis: Estimating Exposure Variations with Different Instrumentations in CCDs

Computer Science Coursework

- Introduction to C and Fortran Programming
- Computational Physics I & II
- Introduction to Computer Science
- Data Structures