

Ozgur Altinok

ozgur.altinok@tufts.edu | ozguraltinok.net | (413) 695 2854

- 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

EXPERIENCE

MINERvA: Neutrino Scattering Experiment

Graduate Research Assistant (2011 - Present)

Tufts University – Medford, MA

- Developing a C++ package that uses grid computing for processing raw data in MINERvA Experiment
- Developed a statistical data analysis package in C++ for MINERvA Analysis Framework
- Designed and maintained a MATLAB toolbox with GUI, simulating neutrino oscillations
- 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 secure and user-friendly interface
 - Macro and Watchdog scripts to ensure data taking and monitoring software is active all times
 - Emergency scripts for quick recovery in case of a problem
- Upgraded and updated obsolete offline documentation to a web based form

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 particles 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 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

M.S. in Physics, 2014

Tufts University - Medford, MA

- Research on Statistical Data Analysis for Δ^+ Production at MINERvA Experiment

M.S. in Physics, 2011

Middle East Technical University - Ankara, Turkey

- Thesis Title: High-Speed Automatic Scanning System for Emulsion Analysis in the OPERA Experiment

B.S. in Physics, 2009

Middle East Technical University - Ankara, Turkey

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