

# 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 high statistics 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*

- Providing 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
- Implementing 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 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

#### Ph.D. in Physics, Expected 2016

*Tufts University - Medford, MA*

- Thesis Title:  $\Delta^+$  Production in  $\mu^- p \pi^0$  Reactions of the LE Exposure

#### Post. Bac. Minor in Computer Science, Expected 2015

*Tufts University - Medford, MA*

#### M.S. in Physics, 2014

*Tufts University - Medford, MA*

#### 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*