# **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) since 2009
- 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

## **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 May 2016

Tufts University - Medford, MA

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

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