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Ozgur Altinok

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EXPERIENCE

Graduate Research Assistant (2011 - Present)   *Tufts University – Medford, MA*
- **Data Reconstruction Package:**   *GitHub: Minerva_Neutrino/CCProtonPi0*
  - C++ package integrated with MINERvA Analysis Framework
  - Using other classes from framework, processes raw data collected by MINERvA Detector
  - Reconstructs particle trajectories and calculates their kinematics
  - Reduces complete data set to a special format to apply Statistical Data Analysis

- **Statistical Data Analysis Package:**   *GitHub: Minerva_Neutrino/CCProtonPi0/NTupleAnalysis*
  - C++ package analyzes the output of Data Reconstruction Package
  - Uses Object Oriented Principles to handle a complicated Data Analysis
  - Controls well behaved objects to create histograms and plots for a more detailed study

- **Neutrino Oscillations MATLAB Toolbox:**   *GitHub: NeutrinoOscillations_MATLAB_Toolbox*
  - MATLAB functions enhanced with GUI used to simulate neutrino oscillations in matter

- **Online Data Reader Package:**   *GitHub: Minerva_Neutrino/Nearline/CAMAC_DataReader*
  - C++ package designed to read, process and plot data real-time

Online Data Monitoring Expert (2013 - Present)   *Fermi National Accelerator Laboratory – Batavia, IL*
- On Call Expert Support for Linux based Near-Online Machines and Control Stations
- Built on-site and remote Control Stations for MINERvA Detector at Fermilab and Tufts University
- Implemented Macro and Watchdog scripts to ensure data taking does not interrupted

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 Fall 2016   *Tufts University - Medford, MA*

M.S. in Physics, 2011   *Middle East Technical University – Ankara, Turkey*

B.S. in Physics, 2009   *Middle East Technical University – Ankara, Turkey*

PROGRAMMING SKILLS

- **Expert:** C++98 and MATLAB
- **Experienced:** Shell Script, HTML, CSS