Ray running a seismic survey.

Recep ‘Ray’ Cakir, Ph.D., L.G.

Geophysicist/Seismologist

Ray has been involved in research on developing active and passive seismic methods, earthquake studies, multi-hazard (earthquakes, floods, volcanoes, landslides, tsunamis) and risk assessments, and has used seismological and geophysical methods to characterize active faults for tectonic maps. He helps FEMA regional partners with risk communication and RiskMAP activities in Washington and runs school activities to help K-12 students better understand earthquake science engineering concepts.

Job Responsibilities

Grant writing, geophysical surveys, hazard and risk-related research, seismological studies, liquefaction susceptibility mapping projects for urban growth areas, preparing improved data for Hazus damage assessments, running Hazus-MH for earthquake, flood and tsunami damage assessments, coordinating Hazus workshops/courses involving state and regional partners.

Professional Interests

Seismology, Geophysics (seismic methods and GPR), Geodetic (InSAR, GPS), Hazus-MH (Earthquake, Flood and Tsunami), and Remote Sensing.

Skills

ArcGIS, GMT, Fortran, Python, Matlab, Seismic Analysis Code (SAC), ObsPy, SeisImager2D/SW, ClawPack-GeoClaw, DeepSoil, GMTSAR, Computer Infrastrucute for Geodynamics (CIG) packages, R-(CRAN), IRIS-PASSCAL Tools, GeoSoft, Wsliq, Amazon Web Services, Google Earth Engine, Anaconda, GitHub.

Education

- Ph.D. Energy and Geo-Environmental Engineering, The Pennsylvania State University, University Park, PA
- M.S. Geosciences (Geophysics), The Pennsylvania State University, University Park, PA
- M.S. Marine Geology and Geophysics, Dokuz Eylul University, Izmir, Turkey
- B.Sc. Geophysical Engineering, Dokuz Eylul University, Izmir, Turkey

Personal Interests

Reading philosophy and systems design-related books and articles, classical music, writing, reviewing other geophysics-related papers, archeology in general.