

# Spring 2013 Positions and Internships

March 21, 2013

## 1 Introduction

The Information Center for the Environment (ICE <http://ice.ucdavis.edu>) is currently recruiting several student interns for computer intensive work for the Spring and Summer of 2013. We will offer both paid and for credit/unit positions available between 6-19 hours a week during spring quarter with the potential for more time during the summer. Computer Science and related majors are encouraged to apply along with any student who has significant computer and programming experience. Below is a list of possible positions, we plan to fill 2-5 of them depending on the applicant pool in the upcoming quarter. In future quarters there will be opportunities to work on topics not chosen now.

Interested candidates should send an introduction email to Alex Mandel (<mailto:aimandel@ucdavis.edu>) stating which projects you are interested in and attach a pdf resume or link to an online resume. We plan to fill at least one position by April 1.

## 2 Positions

Positions 1 & 2 are paid. Additional positions may be paid or for units depending on candidate experience, time commitment and funding.

1. **DotNetNuke Developer** (10-19 hours/wk) - Position will work on the maintenance, deployment and improvement of an existing site.
  - (a) Requirements - DotNetNuke, HTML, CSS, and JavaScript programming, MS SQL Server Management Studio, MS IIS Server, MS Windows Server 2012
  - (b) Desirable - R2i Open Web Studio, MS Visual Studio Web Developer, Running and scripting SFTP services, Google Maps API or OpenLayers API
2. **C# .Net Developer** - Position will port a .Net tool into DotNetNuke
  - (a) Requirements - C# .net, DotNetNuke HTML, CSS, and JavaScript programming, MS IIS Server

- (b) Desirable - R2i Open Web Studio, MS Visual Studio Web Developer
- 3. **Python Web Developer** - Position will help build interactive map and data entry web sites.
  - (a) Requirements - HTML/CSS/JS, Python
  - (b) Desirable - Plone, Django, Openlayers, Postgis, JQuery, AJAX
- 4. **Cluster Technologies** - Puppet, Hadoop file clustering, GlusterFS
- 5. **Android Development** - Web API and Citizen Science App development
- 6. **Virtual Machine Performance Tuning** - KVM, Ganeti, Apache, Nginx, WSGI, Windows and Linux Performance logging
- 7. **Database Performance Tuning** - Postgres/Postgis, Hadoop Map/Reduce
- 8. **Web Design** - CSS3, HTML5, mobile, cross browser, js optimization, Color schemes, layouts, mobile compatibility
- 9. **GeoWeb** - Curation of geospatial web map services using Geoserver, Mapserver, Open GeoPortal, Cartaro, Geonode
- 10. **Parallel Computing** - Moving single threaded processes to multi-core/machine in Fortran, R, Python, or Hadoop

### 3 More Information

ICE is a laboratory under Professor Jim Quinn in the Environmental Science and Policy Department at UC Davis. We specialize in environmental informatics and spatial analysis, curating and analyzing large spatial data sets for many state and federal agencies. We have a growing infrastructure of virtualized computing resources to support our projects and researchers, and are looking to involve more computer science students with our staff of geographers and ecologists.