Internship Title: Landslide Analyst Intern

Name of organization: City of Portland Bureau of Development Services

Type of organization: City government

Organization mission:
The Bureau of Development Services promotes safety, livability and economic vitality through efficient and collaborative application of building and development codes. To meet the needs of our community, we pursue the following goals:

- Support community vitality and protect life, property, and natural resources by promoting compliance with applicable codes and regulations
- Provide cooperative and responsive internal and external customer service
- Process all Bureau functions efficiently
- Create a collaborative workplace that promotes mutual respect through trust, fairness and open communication
- Support continual professional growth of the workforce and organization through education, technology and diversity

Values
- Dedication to serving the public
- Pride in our work
- Care for the long-term viability of our community
- Recognition of worth, quality and importance of each employee and member of the community
- Support of continual learning, education and innovation

Link to organization’s website: www.portlandoregon.gov/bds/

Internship location: 1900 SW 4th Ave, Portland, OR 97201

Internship Description:
The internship will consist of primarily of statistical analysis of the existing City of Portland landslide database. The landslide database has recently been updated and maintained by an ISS intern. The next phase of work will consist of some or all of the following:

- Obtaining representative historical precipitation data
- Obtaining historical soil moisture and saturation data from the USGS
- Correlation of precipitation data to soil moisture conditions
- Correlation of precipitation and soil moisture conditions to landslide occurrence
- Application of statistical analysis to create regression equations for landslide occurrence relative to precipitation totals over various time inputs
● Review of predicted climate change models
● Analysis of the effect of climate change on landslide occurrence

Additional responsibilities may include:
Support staff for landslide response, collaboration and communication with staff at DOGAMI and other City of Portland bureaus, and GIS analyses of landslide locations relative to landslide susceptibility mapping.

Learning outcomes include, but aren’t limited to: communication skills advancement through collaborative project management, obtaining knowledge of local geologic terrain, slope instability hazard areas, and landslide mechanisms typical to different geologic terrains in the City of Portland, and quantitative slope stability analysis.

Required skills and experience: Statistics, GIS, Excel, and general computer skills

Additional preferred qualifications: Strong communication and organizational skills

Preferred student level and/or major: Junior, Senior, or Graduate student in the Department of Geology, Department of Civil and Environmental Engineering, or Department of Mathematics. This internship is best suited for a Geology major interested in pursuing a career in Engineering Geology, a Civil Engineering major interested in pursuing a career in Geotechnical Engineering, or a Mathematics major interested in statistical analysis of scientific data.

Duration of internship: Fall term – spring term 2018 (last day of spring term is June 15, 2018)

Desired start date: Monday, Oct. 2nd, 2017

Time Commitment per week/per term: 12 hours per week; 11 weeks per term for a total of 132 hours per term (note: the fall internship period is 10 weeks). The last day of fall term is Friday, December 8th, 2017. The last day of winter term is Friday, March 23rd, 2018. The last day of spring term is Friday, June 15, 2018. Students may work during school breaks but are not required to.

Application Deadline: Review of applications will begin immediately. Open until finalists are selected. For best consideration, submit your application no later than Monday, October 2nd, 2018.

Compensation: Graduate students: $1782 per term. Undergraduates: $1485 per term (Stipend will be prorated to reflect the day and month that you begin the internship).

Application Instructions: This position requires current enrollment as a PSU student and enrollment for the duration of the internship. To confirm that you are formally admitted and enrolled, please email your full name and student ID to internships@pdx.edu. Include the name of the internship you are applying for in the subject line. Once your status is confirmed, you will receive the full application instructions via email.

About the ISS Climate Action Internship Program:
This program is a partnership between the city of Portland Bureau of Planning and Sustainability and the Institute for Sustainable Solutions to advance the work of the Portland Climate Action Plan.

Interns will attend and participate in 2 networking events and prepare a final poster presentation of their internship work with Climate Action interns from the other cohort organizations. Interns will also be a part of a cohort and will communicate biweekly via D2L.
Funding for the ISS Climate Action Internship Program is made possible by generous donations to the Sustainability Internship Program to support student career pathways in sustainability.

The Institute for Sustainable Solutions is an Equal Opportunity/Affirmative Action Employer and welcomes applications from diverse candidates and candidates who support diversity. Qualified candidates from underrepresented backgrounds are strongly encouraged to apply.