



JOB ADVERTISEMENT

Position: Senior Research Engineer

Timing: Position available immediately and will remain open until filled.

About HB-Risk:

Founded in 2014, Haselton Baker Risk Group (HB-Risk) is the creator of SP3, a next-generation building-specific analysis platform that provides unprecedented resolution in seismic risk assessment. SP3 is used globally to design resilient buildings, help building owners manage their risk, and support decision making for mortgage risk and insurance risk pricing. With the recent release of the *SP3-Portfolio*, our SP3 technology can now also be used to assess millions of properties, including aggregate risk modeling for insurance applications. SP3 is also used for research and teaching at institutions such as UC Berkeley, UCLA, Stanford University, University College London, and University of Colorado at Boulder. Learn more about us at: www.sp3risk.com.

About the Position:

We are expanding our research and development team and are looking for a Research Engineer to help advance the SP3 Platform. Your work will include research related to all steps of building-specific seismic risk assessment – from quantifying ground motion shaking, to predicting structural responses, to creating fragility functions, to communicating building-specific risk results to the end user. Your work will also focus on automation of these risk assessment steps, in order to facilitate building-specific assessments for insurance applications (where limited building data are available). You will collaborate with our software development team to support their implementation of new methods and functionality into the SP3 software platform. You will also interface with SP3 clients on a wide range of cutting-edge projects in resilient design of new buildings, insurance-related risk assessments, mortgage-related risk assessment, as well as portfolio risk assessments for owner and investor decision-making.

We are looking for a Research Engineer that:

- Wants to work on a nimble team that is transforming how we design and assess risk to the built environment in seismic regions.
- Is interested in the exciting and fast-paced environment of a start-up company.
- Has a strong desire to learn and grow and has the ability to quickly master new things.
- Has a team mentality and can work effectively in a team environment.
- Has excellent verbal and written communication skills.

Required skills and experience are as follows:

- PhD or Master's degree in earthquake engineering, catastrophe risk, or a related field
- Knowledge of earthquake engineering or building-specific seismic risk assessment (with prior risk assessment experience preferred)
- Experience with structural modeling and simulating seismic response of buildings (with OpenSees experience preferred)

Preferred skills and experience are as follows:

- Experience with the FEMA P-58 risk assessment method
- Experience with insurance-related catastrophe risk modeling
- Experience with computer programming (Matlab or Python preferred)

We are looking for a full-time permanent team member, but a part-time or termed (e.g. post-doc) position is also possible for exceptional candidates. Work location can be remote or in-person at our Chico office location.

Compensation is commensurate with qualifications and experience. Compensation includes salary, profit sharing, 401k matching, a medical stipend, and possibly company equity.

To apply for this position, please provide your resume and a cover letter that explains your long-term career goals, your interest in transforming how we do building-specific seismic risk assessment, and how your qualifications and experience match the position description. Please send your application materials to careers@hbrisk.com. Please also feel free to contact the SP3 Team with any questions, either by e-mail or by calling the office.