



## **JOB ADVERTISEMENT**

**Position:** Research and Development Engineer

**Timing:** Position available immediately and will remain open until filed.

### **About HB-Risk:**

The Haselton Baker Risk Group (HB-Risk) is creating analysis methods and software to transform how buildings are designed and evaluated in seismic regions of the world. Our Seismic Performance Prediction Program (SP3) equips engineers to better understand building risk and design more resilient buildings, and equips decision makers to better price insurance risk and mortgage risk.

HB-Risk was founded in 2014 by professors at Stanford and Chico State. Their SP3 software is already being used globally by engineering and insurance companies. The SP3 software is also already being used for research and teaching in leading universities, such as UC Berkeley, UCLA, Stanford University, University College London, and University of Colorado at Boulder. The HB-Risk offices are located in beautiful downtown Chico, California. HB-Risk is rapidly growing and is looking to add multiple members to our team in Chico. Learn more about us at: [www.hbrisk.com](http://www.hbrisk.com).

### **About the Position:**

We are expanding our research team and are looking for a R&D engineer to help further advance the seismic risk assessment methods used by HB-Risk in the SP3 software platform. Your work would include research related to all steps of the seismic risk assessment – from quantifying ground motion shaking, to creating methods to predict structural responses, to creating fragility functions to quantify component damageability and repair costs, to clearly communicating analysis results to the end user. Upon completion of any R&D project, you would then collaborate with our software development team to support their implementation of the new methods and functionality into the SP3 software platform. You will also interface and work directly with SP3 professional clients, who are doing cutting-edge projects in resilient design of new buildings, retrofit, and advanced seismic risk assessments.

We are looking for an R&D Engineer that:

- Wants to be a member of a small and nimble team creating software that can have a large impact on our built environment, and society, in seismic regions of the world.
- 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.

We are looking for an R&D Engineer with the following specific skills and experience:

*Required skills and experience:*

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

*Preferred skills and experience:*

- Experience with the FEMA P-58 risk assessment method
- Experience in the structural engineering industry preferred (in design, retrofit, or seismic risk assessment)
- Experience with computer programming preferred (Matlab experience preferred), but note that the majority of programming will be the responsibility of the software team

We are looking for a full-time team member to work with us in-person at the Chico office location. For exceptional candidates, part-time or remote work may be considered.

Compensation is commensurate with qualifications and experience. Compensation can include salary, profit sharing, and a medical stipend; compensation can also be negotiated to include company equity in this quickly growing start-up.

To apply for this position, please provide your resume and a cover letter that explains your long-term career goals, your interest in building-specific seismic risk assessment, and how your qualifications and experience match the position description. Please send this to Angie Carpenter at [angie@hbrisk.com](mailto:angie@hbrisk.com).