Chris Hendrix

cmhendrix@alum.mit.edu • /in/chris-hendrix • github.com/chris-hendrix • chris-hendrix.com

PROJECTS

ML Software for Nuclear Power Plant Maintenance| *Python, OOP, SQL, CI/CD, Agile, Jira, Bitbucket*

- Generalized and scaled the existing Python codebase using an object-based approach so that the software can run ML analyses based on different user input
- Maintained unit and integration tests (unittest Python library) that were run on a Bamboo CI/CD Build Server after commits
- Used NLP and a TensorFlow neural network that produced results that exceeded the client's expected performance metrics

Earthquake Motion Software | *.NET, OOP, Access, WPF, Agile, Jira, Bitbucket*

- Architected the software's object structure using VB.NET, including abstract classes and inheritance
- Built the main plotting component, which is used to plot several different types of information, and gives the user features such as the ability to zoom, change units, export to image, and switch to/from logarithmic axes

Fantasy Baseball Website | *JavaScript, Node.js, React.js, Google Sheets API, React Table, GitHub*

- Built a personal website using Node.js, React.js and the Google Sheets API that allows for custom draft rules
- Pulled live draft data from Google Sheets into filterable React Table functional components using a RESTful connection

WORK EXPERIENCE

Lead Engineer **2017-Present**
Jensen Hughes *Boston, MA*

- Helped scale and modularize Python ML software that predicts required nuclear power plant maintenance actions using neural networks and NLP, and developed ML models that exceeded the client's expected performance metrics
- Lead developer for a nuclear QA, Agile-managed desktop application that processes seismic motion using OOP, .NET language (WPF), and a relational database
- Managed a team of 4-6 engineers and technical experts, architected a relational database, and developed meaningful trends as a part of EPRI funded research on nuclear power risk assessments (paper published in March 2020 on time and on budget)
- Awarded by upper management for developing tools that automate proposal generation and track project budgets in real time
- Non-software work includes seismic risk assessments, blast design, writing proposals, project management, and leading internal BD initiatives

Engineer **2013-2017**
Stevenson & Associates *Boston, MA*

- Architected the object structure and managed a team of 3 developers for a .NET text pre/post processor for text-input-based analysis software, which was successfully delivered to the client
- Non-software work focused on seismic engineering and risk assessments for the nuclear industry

Teaching Assistant, Java **2012-2013**
MIT *Boston, MA*

- Taught weekly recitations going over lecture topics such as data structures, algorithms, and OOP
- Helped administer the course by writing test questions and homework solutions

TECHNOLOGIES & SKILLS

- Languages: Python, JavaScript, VB.NET, Java
- Technologies: Git, Node.js, React.js, Express.js, Redux, Machine Learning, .NET, SQL, NoSQL
- Other: OOP, Agile, CI/CD, Data Analysis, TensorFlow, Excel, PowerBI, Hyper-V

EDUCATION

MIT **2012-2013**
M.Eng., Seismic Engineering, 4.9 *Cambridge, MA*

MIT **2009-2012**
B.S., Civil & Environmental Engineering; Minor: Architecture, 4.4 *Cambridge, MA*