Sam Q. Hollenbach

Oakland, CA | samhollenbach@gmail.com | 510.504.7326

samhollenbach.com | github.com/samhollenbach | linkedin.com/in/sam-hollenbach

Developer with a deep background in quantitative science, applying my passion for programming to full-stack web and mobile development.

Education

Macalester College, St. Paul, MN   *September 2015 - Present*
Physics (with astronomy emphasis), Computer Science   Expected graduation: *May 2019*
Varsity Baseball, NCAA Division III

Experience

Research Intern, Southwest Research Institute,   Boulder, CO   *Summer 2018*
In this NSF funded summer research position I worked on Python scripts for sunspot series reconstruction. I identified new reconstruction approaches by employing high-level visualizations and tailored machine learning algorithms, which improved model confidence by up to 75%.
- SciKit-Learn, TensorFlow, matplotlib [github.com/samhollenbach/ADFSSN]

Software Intern, University of California, San Francisco   *Summer 2016, Summer 2017*
While working in the UCSF Department of Neurology I wrote a number of scripts that performed bioinformatic data analysis, which is included in a recent peer-reviewed scientific publication.
- Joblib (Python) [github.com/samhollenbach/KIRVCF]
- Publication: **ncbi.nlm.nih.gov/pubmed/30321631**

Independent Project, Bullpen Tracker   *September 2017 - Present*
iOS app, web interface, and API for recording and analysing pitching data for baseball teams.
- Expected iOS App Store release January 2019 [github.com/samhollenbach/BullpenTracker]
- Website: **bullpentracker.com** [github.com/samhollenbach/BullpenTrackerServer]

Notable Past Projects
- Spiral galaxy N-body simulation and visualizer in Python [github.com/samhollenbach/Galaxy2]
- Mod creation for hit computer game Minecraft (2010 - age 13) amassing over 2,500 downloads.

Technical Skills

General Purpose
- Python, Java, C, C#, Rust, R, MySQL
- Git, AWS *(EC2, Lambda, RDS, Elastic Beanstalk)*, Docker
- IntelliJ IDEA, PyCharm, Visual Studio Code, RStudio

Web Development
- JavaScript, HTML/CSS, Python
- React, JQuery / AJAX, Chart.js, Flask, Django, SQLAlchemy, Bootstrap, Sass

Mobile Development
- React Native, Swift, Xcode

Current Learning
- GraphQL, C++