James Chang

jcchang92@gmail.com | www.jameschang.io | github.com/longboardcat

Employment

Software Engineer, Release and Tools   **Square, Inc.**   **Oct. 2015 - Present**
- Open sourced git-fastclone, a tool that significantly reduces the time of repeated git clones.
- Implemented monitoring for proprietary, mobile, and hardware Jenkins instances, reducing weekly oncall frustration.
- Participated in weekly oncall rotation.

Software Engineer, Solaris Userland   **Oracle Corp.**   **Jan. 2015 – Oct. 2015**
- Prototyped a script that cut internal build times by up to 90% with a build dependency graph approach.
- Integrated an rsyslog package upgrade to replace the legacy system logger.
- Added automated regression testing for 30 Solaris packages.

Engineering Intern   **Industrial Toys**   **Summer 2014**
- Analyzed user metrics to determine player habits using MongoDB and Python.

Teaching Assistant   **The Summer Science Program**   **Jan. 2015 – Oct. 2015**
- Mentored 36 aspiring scientists and engineers, supervised Python laboratory sessions, and operated telescopes.
- Helped students design and implement orbit determination projects.

Projects

- **Git-fastclone** – A tool that reduces the time of repeated git clones by as much as 90% while optimizing for submodules. Ruby.
- **Robotrike** – Robotic car system, including motors, serial transmission, keypad, display multiplexing, data structures, parsing, and main loops. x86 assembly.
- **Weighted Markov Generator** – Text generator taking multiple input sources with ability to specify which source the generated text is most similar to. Python.

Education

California Institute of Technology, B.S. Computer Science, graduated Jan. 2015
- President of Avery House (200 undergrads).
- Databases, Machine Learning, Computing Systems, Graphics, Data Privacy, Neural Computation, GPU Programming, Microprocessor Systems, Product Design.

Coursera
- Machine Learning (Stanford University).

Recent Tools

- Languages and tools: Python, Ruby, C++, Java, MySQL, Jenkins, Unix
- AWS: S3, Elastic Beanstalk
- Version control: Mercurial, Git