



## Kimberly Furuya

Software Developer  
github.com/kfuruya  
708.415.5616  
3.14kfuruya159@gmail.com

### Skills

#### Develop

C/C++, MATLAB, Python, Erlang, Machine Learning, Machine Vision, Data Analysis, Test Driven Development, Distributed Computing, CQL

#### Design

UX, Rapid Prototyping, User Studies, Storyboarding

#### Define

Neuroscientist, First Responder, Teller of Puns

### Professional Experience

Jan 2013

- Present

Backend Engineer @ Whisper App

- Led introduction and maintenance of the erlang and elixir testing frameworks into whisper's build system.
- Refactored and maintained tests for core user logic
- Implemented data migrations from MySQL to Cassandra
- Implemented core data models and functionality
- Participated in code reviews and styleguide generation

Aug 2013

- Jan 2013

Freelance Software Developer @ Elance.com

- Implemented job candidate- job matching algorithm and employee eligibility scoring
- Software architecture consultant and python dev for email compliance and deliverability startup

Summer

2012

Machine Vision Intern @ JPL, Machine Learning group

- Designed and implemented a background segmentation algorithm for the DARPA Mind's Eye project
- Dropped false positives from dynamic backgrounds by a factor of 3

Oct 2011

- Jul 2012

Neural Interface Developer @ Caltech

- Performed electrode implantation in rodent brain surgeries
- Ran and debugged a legacy spike-sorting algorithm on electrophysiological data (Matlab)

May 2010

- Aug 2011

Engineer and Chemist @ Glucosentient, Lu-Lab UIUC

- Optimized a system for combining isothermal DNA amplification with existing DNzyme sensors.
- "A highly selective lead sensor based on a classic lead DNzyme". ChemComm. 46 (22) 3896-3898

### Education

Fall 2013

MS-HCI Candidate, Interactive Computing  
@ Georgia Institute of Technology

2009-2013

BS in Computational and Neural Science, CS minor  
@ California Institute of Technology