Shotaro Ikeda

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Education

2014 - Present **University of Illinois at Urbana-Champaign**
B.S. Computer Science
GPA: 3.70 / 4.0
Graduation: May 2018

Work Experience

Double Sharp Plus Co. Ltd Dec 2015 – Jan 2016
Internship

- OCR on number plates, mined my own dataset
- Histogram approach had 60% accuracy on test set I provided
- SVM Classifier using LBP Algorithms 50% accuracy
- Implemented Convolutional Neural Network based off of CAPTCHA

CS 196 Jun 2015 – Present
Course Assistant

- Staff involved in working to make course materials, quality assurance, homework, and feedback to instructor.
- Managed three projects, Snappettite, Interest Matcher, and SentiMiner.

HackIllinois Aug 2015 – Present
Systems Lead

- Currently lead developer of the official iOS Application and contributing to backend development.

Relevant Coursework

Courses Taken

CS 241 Systems Programming
CS 374 Algos. and Models of Computation
CS 421 Programming Languages
CS 427 Software Engineering I
CS 461 Computer Security I

Current Courses

CS 473 Algorithms II
CS 498AML Applied Machine Learning

Full list available on my website.

Projects

HandReader3 Oct 2016 – Nov 2016

- Achieved 95% with hand-coded regular neutral network (784 Input nodes, 10 hidden nodes, 10 output nodes).
- 99.2% using Softmax and Convolutional Layers. Used Tensorflow.

Hive Nov 2016

- Wildhacks 2016 Entry, predict final Reddit scores given post title
- Explored Tensorflow+NLP, challenging myself to mine data+come up with a network in 36 hours.
- Also tried to experiment in figuring out why Bag-of-Words is considered outdated.
- Bag-of-Words and 1-gram model, input vector size was 10009.
- Some posts were predicted well (within 400 votes) while others were off (some were predicted negative).

Titanic Nov 2016 – Present

- Kaggle Competition Entry, predicting who survives on the Titanic
- 76% accuracy using Random Forest Classifier, no hyper-tuning

Regex Cross-Compiler Sept 2016

- Fun side project to cross compile Mathematical Regular Expressions to Python Regex.
- Generates syntax tree to parse and transform into Python Regex.

LiquidActionButton Jun 2016

- Open source project. Material design button ported to iOS.
- Added more versatility and obtained small performance gain, about 5FPS.

Flash Me! Feb 2015

- SpartaHack 2016 Submission.
- Created iOS application, created weighting algorithm to increase the probability of showing cards that were marked incorrect.

Languages

Comfortable	C, Python
Previously Used	Swift, JavaScript, CSS, HTML, Clojure, Haskell, and LaTeX
Used in Classes	Java and C++

Interests

- Machine Learning, Artificial Intelligence, Backend, and Full-stack.
- Creative, difficult, non trivial, or challenging problems.