

Tony Peng

Github Website

github.com/tonypeng
tonypeng.com

Schooling

Massachusetts Institute of Technology Class of 2019
Computer Science and Engineering (Course 6-3 Major), Management (Course 15-1 Minor)

Work Experience

Stripe - Summer 2018 - Scala, Python

- Developed the next-generation Smart Retries model, which intelligently determines the best time to retry failed charges using a machine learning based approach to reclaim lost revenue for merchants.

Instagram - Summer 2017 - Python, C++, PHP (Hack)

- Performed modeling and data science work on the Ads Delivery and Ranking team to improve model performance for serving feed and story ads.

Facebook Messenger - Summers 2015, 2016 - Java, PHP (Hack), Javascript, React

- Designed, developed, and experimented with (now) major features including web delivery receipts, deletable/disappearing messages, message attachments, and general code optimizations and bug fixes for Messenger's 1 billion+ users.

Facebook - Summer 2014 - PHP (Hack), Javascript, React

- Worked full-stack on the Business Identity team to create management tools for Facebook's 3+ million advertising clients.

Personal Projects

Fast Neural Style - Python, Tensorflow

- Open source implementation of *A Neural Algorithm of Artistic Style* by Gatys et al. and *Perceptual Losses for Real-Time Style Transfer* by Johnson et al using TensorFlow, with improvements for qualitatively better results.

Together - Java, Swift, PHP, Laravel, PostgreSQL

- An app for iOS and Android to make it easier for friends to get together. Designed and developed entire application full-stack with Lumen, PHP, and Postgres on AWS EC2 and S3 for the back-end, and Java and Swift for the mobile applications with a Flux architecture.

Kit for MIT CPW - Java, Javascript

- The Android app for MIT Campus Preview Weekend 2015. Students could browse all CPW events, add them to their schedule, get reminders, and see lists of other pre-frosh attending events. Integrated with Facebook so students could easily friend each other.

Bloxel Voxel Engine - C#, C/C++, XNA

- Real-time voxel-based graphics engine implementing *Dual Contouring of Hermite Data* by Ju et al. for smooth destructible terrain. Also implemented a reliable UDP protocol to enable networked games. Launched a few games that made it to the front page of IndieDB!

Awards

USA Computing Olympiad Gold Division, Top 75 (2014)
DECA Entrepreneurial Written Plan Finalist, *Silicon Valley Career Development Conference 2015*;
Financial Services 3rd Place, *California State Career Development Conference 2015*; Financial Services Competitor, *International Career Development Conference 2015*

Technical Skills

Languages C#, Java, C/C++, PHP/Hack/HTML/Javascript, Python, Scala, SQL, Objective-C, Swift, Ruby
Frameworks TensorFlow, React, React Native, GraphQL, Laravel, Django, Ruby on Rails, Scalding

Relevant Coursework

Machine Learning (6.036), Computer Vision (6.819), Multicore Programming (6.816), Databases (6.830), Algorithms (6.046), Mathematics for Computer Science (6.042), Computer Systems Engineering (6.033), Computation Structures (6.004), Operations Management (15.7611), Marketing (15.812), Digital Product Management (15.785), Financial Accounting (15.501), Communication