ALLAN PENG
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EDUCATION
University of California, Berkeley – Fall 2012 – Fall 2016
B.A. Double Major: Applied Mathematics & Computer Science, UC Berkeley Regents & Chancellor's Scholarship
London School of Economics - Summer 2016
International Relations & Law

INDUSTRY EXPERIENCE
Mod9/Remeeting
Research Software Engineer   *Spring 2018-Present*
- Implemented new speaker diarization (segmentation) system, improving Error Rate from 15% to 4%
- Major contributor to core ASR-engine product using C++/Boost Async IO, adding features and fixing C++ bugs
- Implemented Batch Decoder that transcribes audio up to 400x faster than real time
- Trained HMM-Neural Net systems to transcribe English and Spanish

UC Berkeley RISELab / AMPLab
Research Engineer   *Spring 2017 – Winter 2017*
- Worked on Pywren, a distributed computing framework using server-less cloud (AWS Lambda)
- Ported and benchmarked Pywren on different cloud infrastructures: Google Cloud & Azure
- Created tutorial IPython notebook demonstrating Pywren for ETL and data analysis.

Facebook
Engineering Intern, Internet.Org Scalability Team   *Fall 2015*
- Worked on i.org traffic monitor, a debugging tool for Android engineers on iorg team
- Added functionality for engineers to dog-food Facebook products (FB-Lite, Free Basics, Native) using various carrier infrastructures from different countries

Linkedin
Engineering Intern, Secure Infrastructure Team   *Summer 2015*
- Worked on internal certificate auth service and CLI for TLS certificate generation, validation, and tracking

TECHNICAL SKILLS
- Python(numpy, scipy) , C, C++(Boost), Go, Bash, Java
- Linux, Kaldi, LaTeX, AWS, Google Cloud, Super Smash Bros. Melee

PROJECTS
Paxos Distributed Data-store (Golang)
- General purpose Paxos library, and sequentially consistent partition-tolerant distributed datastore
Voice-Controlled Autonomous Guitar (Raspberry Pi, Python)   *(www.allan.expert/guitar)*
- Programmed Raspberry Pi to respond to speech commands and play a guitar by actuating solenoids
Linux Firewall (Python)
- Stateful packet filter for Linux. Filters based on IP subnet, DNS, or geo-location
- Implemented DNS redirects, TCP resets, and logging HTTP transactions

RELEVANT COURSEWORK
Graduate Level: Modern Algorithms, Computational Geometry, Distributed Systems (audit at MIT)
Undergrad: Machine Learning, Embedded Systems, Operating Systems, AI, Machine Arch, Network Arch.
Real Analysis, Lin. Algebra, Complex Analysis, Abstract Algebra, Probability Theory, Critical Practices