

Jonathan Sun

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EDUCATION

UC BERKELEY

B.A. IN COGNITIVE SCIENCE

MINOR IN COMPUTER SCIENCE

Expected May 2018 | Berkeley, CA

LYNBROOK HIGH SCHOOL

Grad. June 2014 | San Jose, CA

SKILLS

PROGRAMMING

Proficient:

Java • Python

Familiar:

C • PHP • JavaScript

PLATFORMS & FRAMEWORKS

Android Studio • RStudio • Linux •

Laravel • Git

MARKUP/TEMPLATING

HTML • CSS • \LaTeX • Markdown

DATA/DATABASES

SQL • MySQL • SQLite • R

COURSEWORK

- User Interface Design and Development
- Efficient Algorithms and Intractable Problems
- Database Systems
- Artificial Intelligence
- Computer Security
- Machine Structures (Computer Architecture)
- Data Structures & Algorithms
- Structure & Interpretations of Computer Programs
- Discrete Math & Probability Theory
- Computational Data Analysis

AWARDS

- US Army Reserve National Scholar/Athlete Award (2014)

EXPERIENCE

SILICON VALLEY CHINESE SCHOOL | UI/UX WEB DEVELOPER

Summer 2017 | San Jose, CA

- Created internal web pages for student registration and keeping track of student records.

VOICENT COMMUNICATIONS, INC. | SOFTWARE DEVELOPER INTERN

Summer 2016 | Mountain View, CA

- Designed the management websites that automatically fetches data and generates reports for the company's internal use as well as aggregate data from user profiles using SQL, PHP, and JavaScript.
- Performed QA product testing on new SaaS products, software updates, and filed bug reports.

SILICON VALLEY CHINESE SCHOOL | UI/UX WEB DEVELOPER

Summer 2016 | San Jose, CA

- Created internal web pages for billing and keeping track of student records.

UC BERKELEY COLLEGE OF ENGINEERING | ACADEMIC INTERN

Aug 2015 – May 2016 | Berkeley, CA

- Lab assist CS 61A, UC Berkeley's introductory computer science class.
- Guided 40+ students in Lab sections and Office Hours through labs, homework assignments, and projects.

PROJECTS

GOLDENBEARCHAT | Java, Android Development, Firebase

Location-based chat rooms for UC Berkeley's Bear Landmarks on Android. Realtime syncing powered by Google Firebase Realtime Database.

PHOTOANNOTATE | Java, Android Development

Photo Annotation for Android that allows users to take photos and annotate them.

CRYPTOCONVERT | Java, Android Development

Cryptocurrency exchange rate calculator and converter for Android which allows instant conversion between currencies using live exchange rates from CoinMarketCap API.

WIZARD PARTY | Python, Bash Script, MiniSAT, SATisPy

A specialized SAT Problem solver that finds a topological ordering of people given constraints. This was done to solve a NP-Complete Problem.

NETWORK ATTACK | Bash Script, C, Python, Wireshark, sslniff, Scapy
Performed an automated Network Attack on a Virtual Machine by that exploits FTP vulnerability, captures and analyzes packets, manipulates seeds in PRNGs, rewrites network traffic, and performs DNS spoofing.

AI PAC-MAN GAME | Python, PyCharm

Intelligent Pac-Man that maximizes winning using Search Algorithms, CSPs, Minimax, Expectimax, Markov Decision Processes, Reinforcement Learning, Bayes' Nets, Hidden Markov Models, Inference, and Perceptron Classification.

DATABASE SYSTEM | Java, SQL

Includes File Management, B+ trees, Simple Nested Loop Join, Page Nested Loop Join, Block Nested Loop Join, Grace Hash Join, Query Optimization, and Concurrency Control.