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. Determines user distance to landmarks from user GPS and Network Provider. Real-time syncing for chat rooms 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, sslsniff, 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.