ANDREW WANG

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EDUCATION

California Institute of Technology
Bachelor of Science Computer Science 2019
GPA: 4.0 | National Merit Finalist | Dan Broida/ Sigma Aldrich Scholar

EXPERIENCE

Bank of America Merrill Lynch   Charlotte, NC
Global Technology Analyst   Jun 2017 to Aug 2017
- Integrated management level approval requirements with Ariba procurement software in Java and Python to handle $13 billion in money transfers from 34,000 catalog and punch-out vendors per year
- Developed a full-stack application, a UI wrapper for the Ariba Integration Toolkit, that facilitates data transfer of master and transactional data between the Ariba system and the bank's JDBC-based back-end system

Northrop Grumman   Hollywood, MD
Decision, Support, and Targeting Software Developer   Jun 2016 to Dec 2016
- Implemented new features in C# for Precision Guided Munitions Planning Software per request of US Navy and Air Force
- Generated unit testing classes using mock and stubs to eliminate testing dependencies
- Administered and contributed to weekly code reviews and daily team SCRUMs in accordance with agile development

SKILLS & COURSEWORK

PROGRAMMING: Python, C++, MySQL, C, Java, C#, R, OCaml, Bash, Unix
COURSEWORK: Data Science / Machine Learning, Databases, Algorithms, Data Structures, Programming Languages, Networks, Functional Programming, Statistics

PROJECTS

QuickAir – Predicting Flight Delays and Cancellations   Mar 2017 to Jun 2017
- Used random forests, Naïve Bayes, KNN to classify cancellations with 98.6% accuracy, delays with 83.43% accuracy
- Regressed on delay times to get a MAE of 19 minutes

Shakespearean Sonnet Generation   Mar 2017 to Mar 2017
- Applied a Hidden Markov Model to learn patterns in Shakespeare's sonnets to generate new sonnets with rhyme and rhythm

Sudoku Game and Solver   Dec 2016 to Jan 2016
- Designed GUI, interface, and backtracking algorithm to play and solve Sudoku

Netflix Competition - Predicting Movie Ratings   Mar 2017 to Jun 2017
- Implemented KNN, RBM, SVD to achieve RMSE of 0.86, 8.82% better than Netflix' Cinematch

Predicting Student Performance   Oct 2017 to Dec 2017
- Used random forests to enable educators and schools early detect students at risk for failure.
- Generated visualizations showing potential effects of alcohol on academics using seaborn

ACTIVITIES

NCAA Men's Basketball   Oct 2015 to Mar 2017
Varsity Member
- Featured in November 2015 issue of Sports Illustrated magazine
- Southern California Intercollegiate Athletic Conference (SCIAC) All-Academic Team

California Institute of Technology Dean's Office   Sep 2016 to Current
Dean's Tutor
- Tutored in Python, C++, machine learning, OCaml