Jonathan He

Arcadia, CA/ he50@illinois.edu / (626) 353-4068 / he50.github.io

EDUCATION

University of Illinois at Urbana-Champaign <div align="right">**Champaign, IL**</div>

BS, Computer Science & Statistics <div align="right">Aug 2019 – Present</div>

- Minor in Econometrics, Mathematics
- Coursework: Systems Programming, Algorithms, Database Systems, Data Structures, Computer Architecture, Linear Algebra, Software Design, Statistics and Probability, Applied Statistics

EXPERIENCE

Amazon <div align="right">**Seattle, WA**</div>

Software Development Engineer Intern <div align="right">May 2021 – Aug 2021</div>

- Designed an auto-generated comment blurb feature in a selling partner premium service to provide consistent communication between account managers and operations team
- Implemented service and data access layers in Java for the comment metadata stored in DynamoDB
- Integrated blurbs with UI for management page, create/edit modals and comment section using React and Node.js

Google Developer Student Clubs <div align="right">**Champaign, IL**</div>

Developer <div align="right">Aug 2019 – May 2020</div>

- Developed a web application for professors and students to easily connect with research opportunities and talent
- Implemented TextRank, Doc2Vec for NLP parsing, keyword extracting and similarity scoring between student profiles and research postings
- Integrated Algolia, a third-party search service, to enable full text search for all research postings and profiles
- https://github.com/DSC-UIUC/rbay-data-ml

PROJECTS

Stock Market Prediction Project <div align="right">Aug 2020 - Nov 2020</div>

- Implemented the simple moving average, exponential moving average and LSTM trading strategies on stock prices
- Processed and visualized data from Alpha Vantage to train, test and normalize models using pandas, NumPy, Matplotlib and TensorFlow
- Tested models on Fortune 500 historical trends to optimize returns with a 97% performance rate

Performance Report Enhancement <div align="right">July 2020</div>

- Extracted favicons from millions of websites using Google Cloud
- Integrated with a performance report displaying icon of each company

Auto SMS Bot <div align="right">November 2019</div>

- Created an automated Android mass text sending application in Java
- Integrated SmsManager API and designed a progress bar for better overall functionality

Diabetes Analysis Project <div align="right">August 2019</div>

- Created a machine learning based cloud service on diabetes prediction using the Microsoft Azure ML workspace
- Refined model using logistic regression and normalization on training data

iOS Apps <div align="right">August 2019</div>

- Designed quiz and item management applications providing users with content flexibility in Swift

SKILLS

Programming: Java, JavaScript, Python, C++, SQL, C, Swift
Technologies: AWS, React, Node.js, Google Cloud, Microsoft Azure, Git, Unix
Language: Fluent in Mandarin, Social in Cantonese and Japanese