KYLE QIAN

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EDUCATION

Brown University Providence, RI   Sep 2017 – May 2021
Sc.B. Applied Math – Computer Science. GPA: 3.83
- <u>Relevant Coursework</u>: Computer Systems, Functional Programming, Object-Oriented Programming, Discrete Math, Microeconomics, Econometrics, Multivariable Calculus, Linear Algebra, Differential Equations, Statistical Inference
- <u>Activities</u>: Google igniteCS, Socially Responsible Investment Fund, China Care Brown, STEM Champion, Brown University Orchestra, Chinese Students Association, Intramural Basketball

EXPERIENCE

Encashape Wuxi, CN   May 2018 – Aug 2018
Software Engineering Intern
- Developed software that provides an interface for controlling a 3D printer using C++ and Qt, a GUI framework
- Leveraged data science and interpolation techniques to compensate for inconsistencies in projector intensity, increasing print quality by 8.3%
- Integrated better controls and optimized z-axis movement of printer, improving consistency by 15% on average
- Redesigned interface for printer, focusing on clarity and responsiveness through careful analysis of A/B testing
- Envisioned, designed, and sold a new company marketing initiative to systemize website redesign

Artificial Intelligence Lab Brown University   Jun 2018 – Aug 2018
Undergraduate Researcher
- Conducted extensive research to build an information retrieval model for precision oncology that matches patient data with the most relevant medical abstract or clinical trial
- Used NLP to expand query by discovering similar terms through a 2 layer neural network, Word2vec model
- Generated thesauruses to guide query expansion by extracting from medical databases like MeSH and HUGO
- Co-authored a paper detailing efforts and submitted project to the TREC Precision Medicine 2018 Conference

Data Mining Lab Georgia State University   May 2018 – Jun 2018
Research Intern
- Contributed to development of data transmissions pipeline of solar data from PostgreSQL database to a web interface by performing data acquisition, cleaning, parameter generation, tracking, and interpolation

PROJECTS

Circle Johns Creek, GA   Jun 2018 – Present
- Developed a social media web app using Django that maintains a collection of users and provides multiple functionalities such as connecting with friends, posting pictures, commenting, liking posts, searching, etc.
- Designed a RESTful API with CRUD endpoints to efficiently read and write data to the PostgreSQL database
- Integrating machine learning techniques to recommend posts or friends depending on user's interests

ClassConnect Providence, RI   Jan 2018
- Built and pitched a Flask web app that allows students to connect with other students who have previously taken a specific class at Hack@Brown
- Used Facebook's Graph API to allow ease of communication and integration of contacts into PostgreSQL database

Guizilla Providence, RI   Apr 2018
- Implemented an interactive GUI browser with HTML pages using Java, implementing both client-side and server-side through sockets, reflection, JavaFX events, and XML file parsing.

Search Providence, RI   Mar 2018
- Built a REPL using Scala that responds to user query and returns the most relevant page results, using Google PageRank algorithm and tf-idf calculations to score a document's relevance to a query
- Parsed, tokenized, filtered stop words, stemmed, and indexed a corpus of documents to streamline query process

SKILLS

- <u>Languages</u>: Java, Python, Scala, JavaScript, HTML / CSS, Pyret, Racket, C++, SQL, Bash, Stata
- <u>Technologies</u>: Django, React, Node.js, Express, jQuery, Flask, Bootstrap, Qt, LaTeX, Git

INTERESTS

- social good, finance, blogging, startups, teaching, web apps, violin, basketball, Roger Federer, recreational eating