JUSTIN CHOI

Education

UNIVERSITY OF PENNSYLVANIA - SCHOOL OF ENGINEERING AND APPLIED SCIENCES

B.S. COMPUTER SCIENCE '22

Activities: Renewal College Fellowship - Servant/Leader, Sigma Nu, Korean Students' Association - Social Chair, Penn Tech Review - Co-President

Experience

Software Engineering Intern

AMPE: MAY 2020 - AUG 2020

Member of founding team w/ former Figma + Stripe employees for pre-seed startup aiming to innovate the social calendaring space, backed by the OVO Fund. Helped build the first MVP for alpha testing, and created the user onboarding process, implemented event + chat functionality, built an NLP event-creation parser from scratch, and did more than I could possibly fit in this blurb. Most of all, got to learn an incredible amount with some incredibly cool + talented people in the process ~ 10/10 would absolutely do again if I was given the chance.

Teaching Assistant

PENN CIS DEPARTMENT: JAN 2020 - PRESENT

TA'ed for both CIS262: Automata, Computability, Complexity (S'20) and CIS197: JavaScript (S'20, F'21). Duties included holding office hours, creating/grading homework assignments, answering Piazza questions, etc., as well as coordinating/syncing up with respective professors.

Instructor/Planner

Science Workshop Hong Kong: Jun 2019 – Aug 2019

Accepted to Penn's Global Research and Internship Program and taught abroad for 2 months in Hong Kong on various STEM topics to primary school students! Created various coding / CS curriculums and traveled to run week-long programs throughout HK.

Projects

Ampe App: May 2020 – Aug 2020

Optimized/built in-house as much as possible to avoid relying on bulky dependencies (hence, only 10.7 MB app size(!!) ~ yet still super performant). Optimized animations through Reanimated/Gesture-Handler to run them using the native thread, allowing us to hit 60 FPS. Event parser also built inhouse, as well as our own abstractions/libraries for datetime and calendar events. High emphasis on best practices (git/code hygiene, clean + robust code, etc.) and rapid development speed throughout. Design system inspired by Daniel Eden's subatomic design systems, implemented beautifully by our wonderful designer, Andrew Shen. **TypeScript, React Native, GraphQL (Apollo), Nexus, Prisma, PostgreSQL

Personal Website: JULY 2020

Got sick of having just having this codebase laying around without me actually finishing what I had started, so I got to work implementing and fleshing out the whole website within a week; server-side rendered + blazing fast thanks to Gatsby, deployed on Firebase, built out with TypeScript, and still gradually improving the code base to continue making it cleaner + more modularized. Gatsby/S, React, styled-components, GraphQL, MDX

"CORD-19" Big Data Project: Apr 2020 – May 2020

Performed data cleaning, analysis/EDA, Latent Semantic Analysis (LSA) / K-means clustering, and t-SNE visualization on the CORD-19 dataset, "a resource of over 57,000 scholarly articles about COVID-19" compiled by the Allen Institute for Al, Chan Zuckerberg Initiative, Microsoft Research, NIH, and more, in efforts to help researchers gain new insights and "develop answers to high priority scientific questions relevant to the fight against COVID-19". NLTK, scikit-learn, pandas, NumPy, seaborn

Spotify Playlist Exploration: MAR 2020

Fun side project where I used a Python wrapper library for the Spotify Developer API to explore / visualize the trends and characteristics in the music I was listening to; was a good way to get me comfortable with manipulating data in pandas + visualizing it in an effective way. A pandas, seaborn, plotly, SpotiPy

Technical

GENERAL Java, Python, JavaScript, OCaml, C

FULLSTACK TypeScript, React (+ Native) / Redux, GraphQL (Apollo, Nexus), Prisma, GatsbyJS, MDX, Express, Node.js, PostgreSQL/MongoDB, Webpack/Babel, Jest

DATA/ML Apache Spark/Storm/Hadoop + AWS, SQL, Keras (MXNet/TensorFlow), pandas/NumPy/scikit-learn, Seaborn/matplotlib Relevant Coursework Machine Learning (NLP / Computer Vision), Cryptography, Big Data Analytics, Algorithmic Game Theory, Linear Algebra, Probability Theory

Interests - running, improving my Korean, laughing w/ friends, playing volleyball/basketball/spikeball, fellowship w/ my church, reading anything and everything, writing reflections, quality skincare routines, random Twitter threads, being a sneakerhead, and way too many more to list here ~