Caleb Ren

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EDUCATION

HARVARD UNIVERSITY

Cambridge, MA

A.B., Statistics, Secondary in Computer Science

May 2021

GPA: 3.7; Selected Coursework: Computational Linguistics & Natural Language Processing; Machine Learning; Applied Linear Algebra & Big Data; Generalized Linear Models; Stochastic Processes; Corporate Finance Accounting

TECHNICAL SKILLS

Programming Languages: Python, SQL, JavaScript/TypeScript, MATLAB, R, Java, OCaml, C

Frameworks and Libraries: React (Material UI), Redux, D3.js, TensorFlow, OpenCV, AWS (Amplify, Lambda, Gateway)

Productivity and Creativity: Adobe Photoshop, Lightroom, InDesign, Illustrator, Excel (adv.)

PROJECTS

Schedyool

Aug 2020

- Designed and deployed full-stack web app for principals to create optimized student schedules using React, AWS, and AMPL
- Created front-end spec, mapped out end-to-end user journeys, and coordinated launch across 5 New York elementary schools

Organizm.ai July 2020 – Present

- Manage concept-to-launch of automated real-time inventory tracking and stock management solution
- Design computer vision algorithm to detect small inventory units using overhead-mounted cameras and ML techniques

"Spherelets" - Dimension Reduction

Oct 2019 – Dec 2019

• Conducted research on the theory and applications of sphere-based PCA-derived statistical learning techniques

"That's A Mood"

Oct 2018 – Dec 2018

- Implemented website creation, database management, and embedded systems programming for a public art installation to address student mental health on campus
- Featured in John A. Paulson School of Engineering and Applied Science's quarterly newsletter as a standout CS50 project

EXPERIENCE

Goldman Sachs

New York, NY

July 2020 – Aug 2020

Software Engineering Intern

- Owned product and conduct user research for data validation web app deployed across 2,000+ Global Compliance division users
- Designed and built UI/UX to intuitively create data validation queries using React Redux as part of Core Modelling team
- Placed 3rd in company-wide coding competition for summer interns based on speed and correctness of solution

EF Education First

Boston, MA

EF360 Management Intern (Data Science)

May 2019 – Aug 2019

- Tracked customer demand across 30+ EF Ultimate Break tour products to identify trends in NPS and operating costs as part of core market development team using R and Python
- Developed inferential models for hotel costs, customer return rates, and other internal metrics to reduce operating costs across 12+ hotel properties using ML techniques such as LASSO/Ridge regression and tree classification methods

LEADERSHIP

Harvard College Association for U.S.-China Relations (HAUSCR)

Cambridge, MA

President and Director of Technology

Sep 2017 – Sep 2020

- Lead 50-member \$1MM non-profit in shaping long-term timelines, identifying and executing objectives and key results, and spearheading organization-wide projects to improve efficiency
- Collaborate cross-functionally with technology, educational programming, design, and operations teams to organize and execute 4 global conference programs with 15K+ total attendance
- Direct 250+ US and Chinese volunteers to provide education resources for 10K+ high schoolers across the 4 largest Harvard-run conferences and research competitions in Asia, driving 30% of annual Harvard College acceptances from mainland China

Harvard College Consulting Group

Cambridge, MA

Case Team Leader

Feb 2018 – May 2019

- Led 6-person team to develop entry plans for new data storage and servicing offerings for a Fortune 500 tech company
- Advised market entry for clients by analyzing total available market, barriers to entry, and client competencies
- Conducted focus groups and market analyses to determine product offerings, branding strategies, and value propositions for clients with a combined market capitalization of \$5.2T+ since 2016