

## Caleb Ren

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### EDUCATION

#### HARVARD UNIVERSITY

A.B., Statistics, Secondary in Computer Science

GPA: 3.7/4.0; Relevant Courses: Data Structures & Algorithms; Big Data & Machine Learning; Applied Linear Algebra & Big Data; Generalized Linear Models; Stochastic Processes; Dimension Reduction; Corporate Finance Accounting

Cambridge, MA

May 2021

#### BELLEVUE HIGH SCHOOL

GPA: 3.97/4.0; ACT: 36/36

Bellevue, WA

May 2017

### TECHNICAL SKILLS

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

**Frameworks and Libraries:** React, Node.js, Express, D3.js

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

### EXPERIENCE

#### Goldman Sachs

*Software Engineering Intern*

New York, NY

May 2020 – Present

- Build graphical user interface for internal users to identify data quality errors in files using Java
- Placed 3rd in company-wide coding competition for summer interns based on speed and correctness of solution

#### EF Education First

*EF360 Management Intern (Data Science)*

Boston, MA

May 2019 – August 2019

- Tracked customer demand across 30+ EF Ultimate Break tour products to identify trends in customer satisfaction and operating costs as part of the core market development team
- Developed inferential models for hotel costs, customer return rates, and other internal metrics using ML techniques (PCA, LASSO/Ridge regression, and tree classification methods, etc.)
- Generated actionable recommendations from data analyses to reduce operating costs across 12+ hotel properties

### LEADERSHIP

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

*President and Director of Technology*

Cambridge, MA

Sep 2017 – Present

- Lead 50-member \$1MM non-profit in shaping long-term timelines and objectives, spearheading organization-wide projects to improve efficiency, and solving day-to-day issues
- Adapt 3 global conference products to online format for COVID-19 pandemic, reaching a total attendance of 15K+ students
- 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 acceptances from mainland China

#### Harvard College Consulting Group

*Case Team Leader*

Cambridge, MA

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

### PROJECTS

#### Project Lead – Harvard College Data Analytics Group

Mar 2020 – May 2020

- Led 5-person data analysis team during the COVID-19 global pandemic to model and visualize epidemiological data for the City of Miami Gardens
- Designed and rolled out information campaigns to increase COVID-19 testing access for communities of color

#### “Spherelets” – Dimension Reduction Paper

Oct 2019 – Dec 2019

- Conducted research on the theory and applications of sphere-based PCA-derived statistical learning techniques (spherelets)
- Extended spherelets to denoise real-world test data, outcompeting state-of-the-art dimension reduction techniques

#### “That’s A Mood” – CS50 Final Project

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