# Rishab Srivastava

https://rishab231.github.io/ www.github.com/rishab231 rishab.s@berkeley.edu | 510.640.6898

# **EDUCATION**

## **UC BERKELEY**

COMPUTER SCIENCE & ECONOMICS Expected May 2020 | Berkeley, CA Cum. GPA: 3.748 / 4.0

# AMITY INTL. SCHOOL, NOIDA

Grad. May 2016 | Delhi, India

- 96% in grade 12 Board Examinations
- Perfect 10 CGPA in grade 10 exams
- General Secretary, School Student Council

# COURSEWORK

- Data Structures & Algorithms
- Principles & Techniques of Data Science
- Discrete Math & Probability Theory
- The Structure and Interpretation of Computer Programs
- Probability and Mathematical Statistics in Data Science
- Foundations in Data Science
- Linear Algebra & Differential Equations

# SKILLS

#### **PROGRAMMING**

- Python
- Java
- ·SQL
- git
- Pandas
- HTML/CSS/Javascript
- Jupyter notebook
- · Lisp (Scheme)

# AWARDS & HONORS

# AP Scholar with Distinction | College Board, Inc.

Awarded for scoring a perfect score on five Advanced Placement Examinations.

# INTERNATIONAL CHESS PLAYER | FIDE

Awarded world rating of 1350 by World Chess Federation.

# **EXPERIENCE**

## **UC BERKELEY DEPARTMENT OF EECS | TUTOR**

August 2017 - December 2017 | Berkeley, California

- Department tutor for the course CS C8: Foundations of Data Science
- Teaching 2 weekly tutoring sections of 5-6 students each
- Holding office hours and grading weekly homework assignments and projects

### **INTELENT INC.** | DATA SCIENCE INTERN

May 2017 - July 2017 | Princeton, New Jersey

- Worked with Intelent engineers to design and build advanced analytics tool and solutions across multiple industry use cases
- Analyzed clinical trial datasets formatted in SAS format and derived conclusions from the data using advanced analytics and visualization techniques
- Conducted research work in the field of biostatistics, FDA safety reporting standards and regulations, and *electronic Clinical Report Form* (eCRF) software

# ACADEMIC AND PERSONAL PROJECTS

# **BEARMAPS**

- Using Python, designed and developed Google Maps-esque web app that allows users to interact with a map of Berkeley
- Implemented features such as zooming, routing, autocomplete, location searching, and map rastering using quadtrees, tries, hashtables, and the A\* search algorithm

#### DATABASE

- Designed the API for a relational database management system (SQL) in Java from scratch and implemented the backend
- Supported the following user queries: natural inner joins, filtering, loading/printing/creating tables and arithmetic/NAN/NoValue computations
- Used IntelliJ, git version control, JUnit testing, and Javadoc documentation

## **SCHEME INTERPRETER**

- Used Python to create an interpreter for Scheme, a dialect of the language Lisp
- Applied principles of tree recursion, lexical and syntactic analysis, and functional programming

#### **YELP MAPS**

- Created a Voronoi visualization using machine learning and Yelp data set
- Implemented the k-means unsupervised learning algorithm to group restaurants together based on proximity
- Implemented simple least-squares regression to predict user ratings

#### **ANTS VS SOME BEES**

- Designed and developed a variant of the popular indie game Plants vs Zombies in Python
- Implemented functional and object-oriented programming paradigms

#### HOG

- Developed a simulator for the dice game Hog, featuring multiple strategies
- Implemented control statements and higher-order functions