# Fahad Kamran

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## **EDUCATION**

## **UC BERKELEY**

TRIPLE MAJOR IN PURE
MATHEMATICS, COMPUTER
SCIENCE, AND STATISTICS
Expected May 2018 | Berkeley, CA
Cum. GPA: 3.77

#### CENTERVILLE HIGH SCHOOL

Graduated May 2014 | Centerville, OH Graduated with an Honors Diploma Awarded National AP Scholar

## COURSEWORK

## COMPLETED

Structure and Interpretation of Computer Programs Multivariable Calculus Data Structures and Algorithms Discrete Mathematics and Probability Theory

Linear Algebra and Differential Equations Great Ideas in Computer Architecture Introduction to Real Analysis Introduction to Artificial Intelligence Introduction to Complex Analysis Concepts of Probability Efficient Algorithms and Intractable Problems

Advanced Linear Algebra
Introduction to Machine Learning
Abstract Algebra
Concepts of Statistics
Game Theory in Statistics
Elementary Algebraic Topology
Introduction to Database Systems
Introduction to Time Series

## SKILLS

## **PROGRAMMING**

Areas of skill:

- Data Structures Artificial Intelligence
- Teaching Techniques Algorithms •
   Machine Learning Data Analytics •
   Data Science

## Programming languages known:

• Python • R • SQL • Java • C • SASS • Javascript • Ruby on Rails • Git • Unix • SQL • Android • LEX • HTML • CSS • MIPS • PHP • MEAN.js

## HEAD TEACHING ASSISTANT (DATA SCIENCE, AI, DATA STRUCTURES)

January 2016-Present | Berkeley, CA

- I have taught 5 semesters worth of courses: Foundations of Data Science twice (Head TA once), Introduction to Artificial Intelligence, and Data Structures and Algorithms.
- My basic responsibilities include teaching sections, holding office hours, creating exams and worksheets, and overall course development.
- For my semesters with Data Science, I was in charge of creating a lot of material as it is a new course. I was also in charge of building the website in Fall 2017: data8.org/fa16. This next semester, I will be in charge of auto-grading assignments.
- For my semester with Data Structures and Algorithms, I was in charge of making sure tutoring for the course ran smoothly, and I was in charge of collecting all of the final grades and helping deal with the final requests that were made.

## 84.51° (KROGER/RALPHS) DATA ANALYST INTERN

May 2017-August 2017 | Cincinnati, OH

- Used machine learning models to select important targeting variables to identify which households to send coupon offers to.
- Introduced Natural Language Processing to the company, creating an application to extract themes from comments and writing an introductory document to explain the concept to beginners.

## **COMPUTER SCIENCE MENTORS PRESIDENT**

January 2015 - May 2017 | Berkeley, CA

- I taught both sections for course content as well as sections on how to teach.
- I am part of the executive committee. I was previously the data analyst but I became the president of the organization for a year. I am now an advisor

#### MACHINE LEARNING RESEARCH FECS: YUSUF BUGRA FROM

March 2016 - Present | Berkeley, CA

- Entered the Physionet challenge with a couple of PhD students in order to imploy deep learning techniques to determine heartbeat abnormalities.
- Currently exploring the use of generative features from architectures like Wavenet in discriminative tasks

## MACHINE LEARNING LECTURER DECAL: PRACTICE DATA SCIENCE SKILLS FOR INTERNSHIPS

August 2017 - Present | Berkeley, CA

• Designing and lecturing 6 weeks for a DeCal course aimed at teaching students basic ML and how to apply it in industry

## **PROJECTS**

## TLDR www.github.com/tommyhuynh/tldr

October 2015

• Created a google chrome extension which reads in an article and summarizes it, with the option of a small, medium, or large summary using CSS and Javascript. I primarily worked on the algorithm for creating the summary.

## CHORES WWW.CHORECYCLE.HEROKUAPP.COM

June 2016-Present

• Created a ruby on rails application to streamline the process of chore distribution and completion for my apartment.

## ECARD WWW.HASSAN-ECARD.HEROKUAPP.COM

January 2016

• Created a password protected e-card for my brother's wedding using Ruby on Rails, HTML, CSS, and Javascript.