

# FATIMA IBRAHIM-BIANGORO

SOFTWARE ENGINEERING/  
DATA SCIENCE/AI RESEARCH/  
PRODUCT MANAGEMENT

## CONTACT

408.833.4624  
fibrabimb@berkeley.edu  
fatimaibrahimbiangoro.com  
linkedin.com/in/ifatima  
github.com/fibrabimb

## EDUCATION

University of California, Berkeley  
Computer Science, Cognitive Science  
2014-2018

## AWARDS & HONORS

Berkeley Science Network Scholar  
UC Berkeley, 2014-present  
Computer Science Scholar  
UC Berkeley, 2015-2016  
Palantir Future Scholarship Finalist  
Palantir, 2017  
Box Diversity Scholarship Semifinalist  
Box, 2017

## COURSEWORK

\*classes I am enrolled in  
\*\*classes I am auditing

Economics  
Ruby on Rails  
Introduction to AI  
Machine Learning\*\*  
Principles of Business  
Product Management  
Probability and Statistics  
Foundations of Data Science  
Efficient Algorithms & Intractable Problems  
Data Structures & Advanced Programming  
Structure & Interpretation of Computer Systems  
Linear Algebra & Differential Equations  
Great Ideas in Computer Architecture (Machine Structures)  
Discrete Mathematics and Probability  
Introduction to Database Systems  
Principles and Techniques of Data Science\*

## EXPERIENCE

Web Developer, Product Management Intern / Feb 2017-present  
UC Berkeley School of Public Health, [onlinemph.berkeley.edu](http://onlinemph.berkeley.edu)  
• Redesigned and created the school's website with WordPress, front-end HTML, CSS, and backend JavaScript to client's specifications and to track website traffic  
• Utilized Facebook and Google Ad to analyze 6 effective online ad campaigns, complete campaign backlogs and market research, and collaborated across the design, marketing, and developer teams

## PROJECTS

CS 188: Artificial Intelligence (Python) / Fall 2017  
• Refined a game of Pacman using search algorithms, representations of knowledge, inference  
• Implemented a binary perceptron, computation graphs (computed using backpropagation) to compute vectorized gradients and created a small neural network library  
• Trained the neural network to approximate the  $\sin(x)$  regression over  $[-2\pi, \pi]$ , pil, classify handwritten digits from the MNIST dataset, performed approximate Q-Learning using a deep neural network to solve the cartpole task, and built a small neural network model that identifies language for one word at a time given a provided dataset  
Industrial Engineering & Operational Research 186 (Product Management) / Fall 2017  
• Designed, conducted research on, and currently developing a lifestyle app (dayli) to track daily activities to pitch to potential investors at the end of the semester  
• Completed MVPs, market validation, competitive analyses, backlogs, collaterals, and prototypes for the product  
Cognitive Science N1 / Summer 2017  
• Conducted and presented a cognitive research proposal on neural decoding in Machine Learning for more emotionally intelligent AI agents  
Personal Website (JavaScript, CSS, HTML) / Summer 2017—Present  
[fatimaibrahim.com](http://fatimaibrahim.com)  
Hack.Syria Hackathon App (Java, XML) / Feb 2017—Present  
• Utilized the Android SDK to develop an app prototype for a craigslist-like mobile application to connect Syrian refugees abroad in new countries to local landlords and hiring managers  
CS 186: Introduction to Database Systems (Java) / Spring 2017  
• Designed and created a database architecture with a B+ tree structure using Java by integrating query optimization with system R optimizer  
Data Science C8: Data Science (Python, NumPy) / Spring 2017  
• Designed and manipulated data from <http://data.gov> on the correlation between data from high school demographics in New York and surrounding employment demographic rates  
CS61C: Computer Architecture (C, MIPS) / Fall 2016  
• Designed and created a CPU through a software simulator (Logisim)  
CS61B: Data Structures & Advanced Programming (Java) / Summer 2016  
• Implemented image rastering and a back-end web mapping app of Berkeley, which used Dijkstra's algorithm for shortest directions to user input for optimal runtime

## INVOLVEMENT

Black Engineering and Science Student Association/ Aug 2017-present  
UC Berkeley BESSA-NSBE Finance Officer  
• Managing finances + writing grant proposals for the UC Berkeley National Society of Black Engineers (NSBE) chapter  
CS10: The Beauty and Joy of Computing / Aug 2015-Dec 2015  
Lab Assistant  
• Taught the fundamentals of programming with a focus on major areas of computing such as abstraction, design, recursion, concurrency, simulations, and the limits of computation.  
• Resolved ~250 bugs on a weekly basis through labs and course projects

## SKILLS

Java / Python / SQL  
Scheme / HTML / CSS / C

## DATABASE MANAGEMENT SYSTEMS

Oracle / Microsoft SQL Server  
MySQL