

# NAVNEEDH MAUDGALYA

(925) 548-9736 – navneedhm@berkeley.edu - github.com/navneedh

<b>EDUCATION</b>	<b>UNIVERSITY OF CALIFORNIA, BERKELEY:</b> 2016-2020 B.S. Electrical Engineering and Computer Science (EECS), B.A. Cognitive Science GPA: 3.71/4.00 <b>COURSEWORK:</b> Structure of Computer Programs, Data Structures, Internet Architecture, Information Devices and Systems, Signals and Systems, Linear Algebra, Multivariable Calculus, Discrete Mathematics, Probability and Random Processes, Optimization Models, Artificial Intelligence, Intro to Machine Learning, Intro to Cognitive Science, Developmental Psychopathology, Human Neuropsychology
<b>EXPERIENCE</b>	<b>REU RESEARCH INTERN:</b> Florida International University, 2018 Developed a homophily-based reconnaissance attack for targeted infiltration of online social networks Funded by National Science Foundation and advised by Professor Niki Pissinou <b>UNDERGRADUATE RESEARCHER:</b> Berkeley Computational Cognitive Science Lab, 2017 – Developed heroku application to sample natural images from generative models during experiment Using inference with different generative models (ALI, GANs, VAEs) to model visual feature spaces <b>DATA SCIENCE INTERN:</b> Stroll Health, 2017 Enhanced price estimate and network determination models for medical imaging centers Improved data assets by normalizing and matching data sets using novel fuzzy string matching algorithm Designed submission for Robert Wood Johnson Care Challenge and won \$50,000 first place prize <b>TECHNICAL CONSULTANT:</b> Codebase Consulting Group, 2016 – 2017 Developed an intelligent chatbot to conduct technical interviews for Crowdbotics
<b>COMMUNITY</b>	<b>EE16A/B COURSE STAFF:</b> University of California, Berkeley, 2017 – 2018 Debugged, graded and helped facilitate homework, tests and weekly electrical engineering labs <b>PRESIDENT AND TEAM CAPTAIN:</b> Dublin High Robotics Club, 2012 – 2015 Directed two 8-student teams in constructing a robot for the VEX Robotics World Championships Organized and taught robotics, design, and computer science workshops at local middle schools <b>PROJECT INTERN:</b> iGate Innovation Hub, 2015 Created a database of local investors and an online map displaying regional entrepreneurial activity Assisted professionals at a startup called SafeTraces with synthesizing edible barcodes on food
<b>PROJECTS</b>	<b>MUSICAL MONTE CARLO MARKOV CHAIN:</b> 2018 Produced novel music that matched characteristics of original piece by sampling from MCMC algorithm Placed in “Top 3 Markov Chain Applications” for EECS 126 final project competition <b>K-MEANS CLUSTER LEARNING:</b> 2017 ( <a href="https://github.com/navneedh/myNet">https://github.com/navneedh/myNet</a> ) Developed Python library to construct and debug custom neural nets to classify given data Using PCA, kernels, and CNNs to initialize centroids to improve k-means' speed of clustering <b>SPECIAL OLYMPICS:</b> 2012 - 2016 Led team in designing and building machines to help paraplegic students play basketball and soccer
<b>AWARDS</b>	<b>REGENTS' AND CHANCELLOR'S SCHOLAR:</b> UC Berkeley, 2016 – 2020 <b>COMMUNITY AWARD:</b> VEX Robotics World Championships, 2014 <b>BEST EDUCATION APP BY PEARSON INC:</b> “HSHacks” Hackathon, 2014 <b>EXCELLENCE AWARD:</b> VEX Robotics State Championships, 2013 – 2014
<b>SKILLS</b>	Python, Java, Pandas/Numpy/Scipy, Javascript, Keras, Theano, Tensorflow, SQL, HTML/CSS, LaTeX