

NAVNEEDH MAUDGALYA

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY: 2016 – 2020

B.S. Electrical Engineering and Computer Science (EECS), B.A. Cognitive Science

GPA: 3.71/4.00

COURSEWORK: Structure of Computer Programs, Data Structures, Internet Architecture, Information Devices and Systems, Signal Processing, Digital Electronics, Linear Algebra, Multivariable Calculus, Discrete Mathematics and Probability Theory, Intro to Cognitive Science, Developmental Psychopathology, *Human Neuropsychology*, *Intro to Linguistics*, *Probability and Random Processes*, *Optimization Models*

EXPERIENCE

UNDERGRADUATE RESEARCHER: Berkeley Computational Cognitive Science Lab, 2017 - 2018

Extracting and interpreting a variety of features of images from convolutional neural networks to find similarities between human and machine learning model judgements

Using inference with different generative models (ALI, GANs, VAEs) to model human feature spaces

DATA SCIENCE INTERN: Stroll Health, 2017

Improved patient price estimate and network determination models for medical imaging centers

Created fuzzy string matching algorithms using hopfield networks, word vector embeddings and autoencoders

Designed submission for Robert Wood Johnson Care Challenge and won \$50,000 first place prize

TECHNICAL CONSULTANT: Codebase Consulting Group, 2016 – 2018

Developed an intelligent chatbot to conduct technical interviews for Crowdbotics

PRESIDENT AND TEAM CAPTAIN: Dublin High Robotics Club, 2012 – 2015

Directed two 8-student teams in constructing a robot for the VEX Robotics World Championships

COMMUNITY

EE16A/B COURSE STAFF: University of California, Berkeley, 2017 – 2018

Debugged, graded and helped facilitate weekly electrical engineering labs and homework

CO-FOUNDER AND MENTOR: Middle School Engineering Programs, 2013 – 2015

Organized and taught robotics workshops to fundraise for the Dublin High Robotics Club

PROJECT INTERN: 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

PROJECTS

KMEANS CLUSTER LEARNING: 2017 (<https://github.com/navneedh/myNet>)

Developed Python library to construct and debug custom neural nets to classify given data

Using principal component analysis, kernels, and convolutional neural networks to initialize centroids

SPECIAL OLYMPICS: 2012 - 2016

Led team in designing and building machines to help paraplegic students play basketball and soccer

TYP-ID: May 2014

Helped make a web app that used keystroke dynamics to validate students' homework submissions

AWARDS

REGENTS' AND CHANCELLOR'S SCHOLAR: UC Berkeley, 2016 – 2018

COMMUNITY AWARD: VEX Robotics World Championships, 2014

BEST EDUCATION APP BY PEARSON INC: "HSHacks" Hackathon, 2014

EXCELLENCE AWARD: VEX Robotics State Championships, 2013 – 2014

SKILLS

Python, Java, Pandas/Numpy/Scipy, Javascript, Keras, Tensorflow, SQL, Arduino, HTML & CSS, LaTeX