Pramoda Karnati

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EDUCATION

Massachusetts Institute of Technology — Cambridge, MA

Candidate for Masters of Engineering in Computer Science: Artificial Intelligence Concentration — Jan 2020 – Dec 2020

Bachelor of Science in Computer Science and Engineering | **GPA:** 4.6/5.0 — Aug 2016 – May 2020

Relevant Coursework: *ML for Healthcare; Machine Learning; Computer Vision; Assistive Technology; Algorithms; Systems; Statistics; Computational Cognitive Science, Deep Learning for Biological Sciences*

Academic Positions: *Graduate Teaching Assistant, Oral Communication (6.UAT) and Artificial Intelligence (6.034)*

EXPERIENCE

Facebook — Menlo Park, CA

Software Engineering Intern, Business Interfaces — Jun – Aug 2020

- Developed admin assignment feature for Pages Manager app on Android; lead testing and bug bash for deployment

Apple — Cupertino, CA

Machine Learning Intern, Proactive Intelligence — Jun – Aug 2019

- Built a generative statistical model to understand and analyze daily interests and habits of users using daily phone activity

Software Engineering Intern, Siri Client — Jun – Aug 2018

- Prototyped new features for CarPlay for client-facing applications

DeepHealth — Cambridge, MA

Machine Learning Extern — Jan 2020

- Analyzed output of breast cancer detection software to improve accuracy and reduce false positives

MIT Research — Cambridge, MA

Keane Lab

Automatic Assessment of Mammographic Images: Positioning and Quality Assessment – M.Eng Thesis — Current

- Improving medical imaging analysis for breast cancer detection; creating a model for automatic assessment of mammographic images to aid in better cancer detection

Keane Lab

Wearable Navigation for the Visually Impaired — Jan 2019 – Aug 2019

- Developed a smart-glasses system using image recognition pipelines and low-cost hardware
- Accepted for YCombinator interview, MIT 100k Finalist, IDEAS Global Challenge Finalist

Media Lab: Living Mobile Group

Wearable Technology to Detect and Deter Sexual Assault — Oct 2016 – May 2017

- Designed, programmed, and tested wearable technology and companion Android application to detect sexual assault

PROJECTS AND SKILLS

Selected Projects

- ***VisionGlass:*** Assistive OCR Glasses for People with Visual Impairments
- ***Evaluating Deep Learning Methods in Prediction of Patients with Pediatric Crohn's Disease*:** Evaluated methods to predict disease subtype of patients using RNA-Seq expression data with DeepNets and CNNs using the KEGG database
- ***Modeling Parkinson's Disease Using MRI Images and Biomarkers*:** Investigating Parkinson's progression and stage using magnetic resonance imaging for CNN model and critical biomarker data
- ***Toca (https://tocalabs.org/):*** Developing a mobile app to connect vulnerable communities with sustainable digital work
- ***Image Colorization with Classification:*** Created a pipeline to apply category specific CNNs to black-and-white images
- ***Classifying Pen-Based Handwritten Characters:*** Used RNNs to classify online pen-based handwritten characters and built application to convert digital handwriting to text

Skills: Python; Java; C#; Objective-C, Swift; HTML, CSS, JavaScript; Unity; Keras, PyTorch, OpenCV; Android; Arduino

LEADERSHIP

MIT Bhangra Team: *Co-Captain* — 2019 – 2020

- Organize team practices and choreography; organize competitions, gigs, and summer workshops; ensure smooth dynamics

MIT Global Startup Workshop: *Webmaster* — 2018 – 2020

- Help organize annual global workshop to accelerate the entrepreneurial ecosystem of a host region, managed website

SAGE: Student Advisory Group for Engineering: *Board Member* — 2018 – 2020

- Met with and provided the Dean of Engineering a direct connection to the undergraduate student experience and perspective