# Sruthi Kurada

sruthi.kurada1@gmail.com | 978-795-9032 | 1 Pine Brook Lane, Littleton, MA | linkedin.com/in/sruthi-kurada/

#### **EDUCATION**

# Advanced Math and Science Academy Charter School

Marlborough, MA

**GPA:** 4.71/5.00 – Honor Roll

12th Grade, High School

Activities: Varsity Math Team - President, Cloud Computing Club - Co-President, Varsity Tennis Team, Karate Junior Black Belt Skills: Python – (Pytorch, TensorFlow, Keras), Java, Data Science, Machine Learning, iOS & Android Development Awards: Google Science Fair Top 100 International Semifinalist and Massachusetts Winner, Taco Bell Live Más Scholarship Winner, Coolidge Senator Scholarship Winner, NCWIT National Honorable Mention (Top 400), Massachusetts Winner

#### RESEARCH EXPERIENCE

# Applied Audio Machine Learning Research

Littleton, MA

Data Science Research Lead

March 2018 - Current

Parkinson's Disease Diagnostic Classifier (2019 - Present):

- Developed a classifier that leverages patient voice data to diagnose Parkinson's Disease using a novel, generalizable feature extraction technique. The technology achieved 87% accuracy and outperformed current clinical diagnostic methods
- First authored a conference paper for presentation at the 2020 IEEE CHASE Conference (<u>bit.ly/pd-classification</u>) Generalizable Audio Classification Pipeline (2018 2019):
- Built a state-of-the-art Audio Classifier on the UrbanSound8k dataset that leveraged unique preprocessing and data augmentation approaches (>99% accuracy) – previously published papers only reported 74% accuracy
- Selected as Google Science Fair Top 100 International Semifinalist and Massachusetts Winner
- Published this research in The Columbia University Junior Science Journal (2019 Edition)

### Bayes Mendel Lab at Harvard School of Public Health

Cambridge, MA

Computational Genomics Researcher

September 2020 - Current

• Developing a cancer prognostic model including many subtypes for accurate, efficient risk analysis.

#### MIT PRIMES Student Research at Biomedical Cybernetics Laboratory

Cambridge, MA

Computational Biology Researcher

January 2021 - Current

• Discovering the role of Ergothioneine on the mouse genome through its effect on disordered proteins.

#### **WPI Data Science Institute**

Worcester, MA

Summer Research Intern (Research Experience for Undergraduates)

May 2018 – October 2018

- Developed deep learning strategies that used Recurrent Neural Networks to handle missing data in patient healthcare records
- Presented research at 2018 IEEE MIT Undergraduate Research Technology Conference (bit.ly/missing-values-healthcare)

## INDUSTRY EXPERIENCE & EXTRACURRICULAR ACTIVITIES

MetroHacks Cambridge, MA

MetroHacks EmpowHer Executive Director

September 2018 - Current

- Launched <u>EmpowHer</u> in 2020, a national computer science competition for high school girls grew the competition to include over 250 student participants and 85 mentors across the country during the COVID-19 pandemic
- Scaled MetroHacks, a non-profit organization dedicated to improving practical STEM education, across the entire East Coast
- Helped raise >\$100K through partnerships with several Fortune 500 companies including Microsoft and Staples

MITRE Bedford, MA

Innovation and Technology Intern

June 2019 - August 2020

- Predicting Video Conferencing Failure (Summer 2020): Increasing workplace productivity through developing an algorithm to predict video conferencing failure and providing alternative methods for collaboration
- Winner of the 2020 MITRE AI Challenge: Developed ML detection software to protect MITRE against phishing attacks
- Virtual Hallway Innovation Project (Summer 2019): Prototyped an employee identification system using Optical Character Recognition (OCR) on employee badges and facial recognition using live feed video data

# FIRST Robotics Competition (FRC)

Devens, MA

Outreach Team Lead

November 2018 - June 2019

- Led development of the Steam Splash educational platform to teach STEM to elementary students (bit.ly/steamsplash).
- Winner of New England District Championship (Chairman's award) Invited to 2019 Global Championship