Angel Sylvester

sylve057@umn.edu | 612-200-6907| linkedin.com/in/angel-sylvester-443158147
https://github.com/angsylvest

Education

University of Minnesota - Twin Cities   *Sept 2020 - present*
- *Ph.D Artificial Intelligence and Robotics*

MACALESTER COLLEGE   *Sept 2016 - May 2020*
- *B.A Computer Science (with honors) and Chemistry*

Research Experience

UNIVERSITY OF MINNESOTA - TWIN CITIES

Research Assistant   *Sept 2020 - present*
- Comprehensively examined the bridge between the chemical master equation and foraging in SWARM robotics to produce a differential equation model that does not require post-hoc tuning and prior knowledge of the nature of the swarm foraging scenario

MAYO CLINIC

Mayo Innovations Research Scholar   *Oct 2019 - Mar 2020*
- Collaborated with Mayo Clinic's Department of Business Development in the assessment of an innovative product developed by physicians and researchers at the Mayo Clinic. Findings will be presented at Mayo Clinic in Rochester in March 2020

MACALESTER COLLEGE

AI/Robotics Lab Summer Researcher   *May 2019 - August 2019*
- Implemented two convolutional neural networks (with ultimate validation accuracy of 95% and 97% respectively) and optimized Monte Carlo localization code base to facilitate indoor robot localization and navigation

HEALTH PARTNERS

Neuroscience Intern   *Jan 2019 - May 2019*
- Assisted in scribing during surgeries, conducting behavioral tests in rats, and validating mass spectrometry data and researching additional literature confirming the potential of intranasally administered deferoxamine as a treatment for Alzheimer's Disease.

Projects

Prototyping a Robotics Kit for Middle School Students (on-going project)
- Created a prototype robot equipped with a raspberry pi based framework and basic motion and sensing functionalities that are compatible with ROS

Designing a Multi-User Interface Using Matrix for Virtual Reality Environments
- Using Babylon.js and Matrix, a multi-user interface was configured that would encourage multiple users to interact across different Oculus headsets

MacStudyAway Mobile App using Ionic Framework and Firebase backend
- Coordinated with Macalester Center for Study Away to create a UX friendly, tinder-inspired interface for study abroad program recommendations with forum page/timeline feature

Additional Experience

UNIVERSITY OF MINNESOTA
CSCI 2980 Discussion Facilitar/TA   *Jan 2021 - present*
MACALESTER COLLEGE
Intro to Computer Science Preceptor   *Jan 2018 - May 2019*
ITS Help Desk Assistant   *Sept 2017 - May 2018*
ISP (International Student Program) Mentor   *Sept 2017 - Jan 2018*

Awards

ADC Fellowship   *Sept 2020 - May 2021*
- Academics based, year-long fellowship granted to students in the field of wireless and advanced networking technology

Datafest (Statistical Modeling Competition) "Best in Show"   *March 2019*
- Derived ingenuitive insights from Canadian Women's Rugby Team dataset, quantifying role of fatigue and workload on team performance

Skills/Languages

Machine Learning: Tensorflow, kera, scikit-learn
Programming Languages: Python, Java, C, Typescript, HTML CSS
Frameworks: ROS, Babylon.js, Ionic, Netlogo
Databases: SQL , Firebase
OS Proficiencies: Linux, Windows, Mac