MICHAEL NAGUIB

Computer Science & Mathematics

Personal Info

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Github Profile https://Github.com/Michael-Naguib

Programming Languages

Proficiency Ranked Descending:

- 1. Python
- 2. Java, C, LaTeX
- 3. JSX, JS, HTML, CSS

Familiarity Ranked Descending:

- 1. SQL, MATLAB, Mathematica
- 2. C++
- 3. Assembly, R

Technical Skills

- Version Control (Git / Github)
- Anaconda
- TensorFlow, Numpy, & Keras
- OpenMPI, OpenMP, CUDA
- Multithreaded Programming
- Algorithm Design
- Shell Scripting (Bash & Powershell)

Experience

Tulsa Undergraduate Research Challenge (TURC)

- Undergraduate Research & Teaching Assistant Summer 2019-Summer 2020.
- Worked under Dr. Sandip Sen.
- Coauthored <u>Motivation and Design of the Conversational</u>
 <u>Components of DraftAgent for Human-Agent Negotiation</u> the runner up for the Human Agent League ANAC 2020.
- Designed and taught labs for a Java based Introduction to Computer Science Course (CS-1043).

St. Philip Neri Catholic Newman Center at The University of Tulsa

- President of Newman Men's Group
 Spring 2019-2020
 - Managed logistics and planning for events in which men could grow in faith & fraternity.
 - o Secured funding for events.
- Head Sacristan
 Fall 2020-Present
 - o Managed mass minister scheduling and training

Education

The University of Tulsa

May 2022 (Expected)

- GPA: 3.8/4.0 Dean's List (5/5 Semesters Completed)
- B.S. Computer Science & B.S. Mathematics
- 800 South Tucker Drive, Tulsa, OK 74104

St. Thomas More Academy May 2018

- GPA: 3.67/4.0 SAT: 1360
- Recipient of the Caritas Award
- 3109 Spring Forest Rd, Raleigh, NC 27616

Selected Undergraduate Coursework

- Algorithms, Data Structures, Al, Networks, HPC, & Databases
- Theoretical Calculus, Linear Algebra, Topology, & Differential Equations
- Discrete Mathematics, Statistics, & Numerical Methods

Projects

Boid Simulation (Independent Project)

- Implemented Craig Reynolds Flocking algorithm for autonomous agents in O(n*In(n)).
- Utilized Euler Integration to solve the force updates on the particles.

CWBURD (TURC Project)

- We implemented a distributed computational model for Cooperation with Bottom-up Reputation Dynamics a game theoretic reputation & norm-strategy based interaction model.
- Performed an empirical analysis of the paper and found the dominating dynamics.