Michael James Luvin

516-543-8731 | michaelluvin2022@u.northwestern.edu

Education

Northwestern University — Evanston, IL

Master of Science in Computer Science — *Anticipated Dec. 2022*

Bachelor of Science in Mechanical Engineering — *Anticipated June 2022*

- **GPA:** 3.97/4.00
- **Programming Coursework:** Data Structures & Algorithms, Intro to Computer Systems, Human-Computer Interaction, Object-Oriented Programming, Functional Programming

CS Projects

Join Track (*https://jointrack.club*) — Summer 2020

- Worked with a team member to develop an all-in-one sign up page for NU Track Club to streamline integration of new members into the club's mailing list and GroupMe
- Implemented a SQLite database to store user information, add/delete admins, and block page abusers
- Verified user admin privileges for every attempted admin action on our Flask server in in addition to initial front-end verification with Google API to increase security
- Made and reviewed pull requests in order to maintain quality code and spread engineering knowledge
- **Utilized**: Git, React, JavaScript, Material-UI, Python, Flask, SQLite, GroupMe API, Google API

COVID MLB Fantasy (*https://rvcmlbfantasy.com*) — Summer 2020

- Developed a full-stack web application to display up-to-the-minute standings and team information for a custom-format MLB fantasy league
- Leveraged the MLBStats-API Python library to fetch up-to-date MLB standings whose response data was processed on the back-end to calculate the fantasy standings
- Implemented a serverless back-end in Python using AWS Lambda with API Gateway to minimize costs
- **Utilized**: React, JavaScript, Python, AWS (Lambda Serverless, API Gateway), Material-UI

Pace Calculator (*https://pacecalcnu.com*) — Summer 2020

- Developed an improved running pace calculator to replace the now defunct coolrunning.com
- Deployment: registered domain with AWS Route 53, hosted static site on S3 bucket, secured with CloudFront
- Sought user feedback after first deployment and subsequently implemented suggestions, such as the ability to select common race distances (e.g. Marathon) rather than manually inputting the numerical distance
- **Utilized**: React, JavaScript, CSS, AWS (Route 53, S3, CloudFront), Material-UI

Backgammon — Spring 2020

- Worked with a classmate to develop an implementation of Backgammon in C++ using GE211 game engine library
- Wrote 100+ lines of tests to ensure proper gameplay in addition to interactive UI testing

NU Robotics Club — Sept. 2019 – Present

- *McCormick Design Competition*: Designed and built an autonomous robot that drives towards a sound source. Programmed robot in C using Arduino IDE.
- *Robobrawl*: Quickly learned CAD (SolidWorks) and manufacturing skills (mill, lathe, soldering) to complete the design and manufacture of team's robot to meet rapidly approaching competition deadline

Leadership and Experience

President, **Northwestern Track Club** — Jan. 2020 – Present

- Organize executive board meetings, communicate with advisors to develop competition itineraries based on organization guidelines
- Foster a welcoming atmosphere as the face of the club

Drop-in Peer Tutor, **Northwestern University** — Sept. 2019 – Present

- Tutor groups of 10+ undergrad students in Engineering and Math classes
- Group together students with similar questions to facilitate a collaborative learning environment

Technical Skills

C/C++, Python, JavaScript, React, Git, Flask, Material-UI, HTML, CSS, AWS (S3, Lambda, API Gateway), Arduino, SQLite, MATLAB