# **Michael Simpson**

simpsom@clarkson.edu (845) 559-3711

# **Education**

Clarkson University: Potsdam, NY - Bachelor of Science

**Graduating December 2022** 

- Major in Computer Science and Information Technology
- Minors in Digital Art and Psychology

New Paltz Central High School: New Paltz, NY

**Graduated May 2018** 

# **Technical Skills**

Languages & Frameworks: C++, C, C#, Python, Java, Angular, TypeScript, .NET, SQL, HTML, CSS

Software: VS Code, Terminal, Azure suite, Git, Docker, Slack, Teams, Office suite, Vim, Tmux

OS: Windows, MacOS, Linux

# **Work Experience**

# Medico Physicians, LLC: Phoenix, AZ

June 2022 - Present

*Software Engineering Intern (Remote)* 

- Develop and maintain medical website for 8 offices and 5,000+ patients
- Full-stack development using Angular, .NET, REST API's, Azure suite and SQL databases
- Implement website features that maintain patient records, procedures and doctors' notes, schedule appointments, upload scans, order medications and export patient data
- Comply with HIPAA standards throughout development

# Gaylord National Resort & Convention Center: Fort Washington, MD - Bar-back

**Summer 2021** 

Stocked and maintained 40 ft. bar serving 350 customers and catered to clients' needs

### Mohonk Mountain House: New Paltz, NY - Granary Buffet Server

**Summers 2017 - 2019** 

Directed co-workers to prepare and maintain buffet, assisted guests with special requests

# **Relevant Experience**

### Spell checker in Python

April 2022

• Created statistical model that performed spell correction and word prediction using numerous public data sets - correct word in top 5 predictions >80%

# Basic shell in C February 2021

- Implemented commands: exit, echo, cd, ls, pwd, jobs, kill, help, clear
- Added history functionality to save previous commands

#### Model of a basic file system in C

**March 2021** 

- Created virtual disk that included basic commands for adding, viewing and removing files
- Modeled storage and commands to not corrupt on crash

### Threading deadlock puzzles in C

April 2021

• Designed deadlock and solution versions of dining philosophers and baboon crossing puzzles

# Open AI gym cart pole in Python

April 2021

• Implemented Q-learning and prioritized sweeping reinforcement learning algorithms

#### TCP client and server for real-time messaging in Python

October 2020

• Supported user-to-user and user-to-group messaging based on RFC 1459

# Instant messenger and file sharing program in Java

October 2019

- Implemented multi-threading to allow multiple client-server connections
- Included audio/image sharing, chat box and friend's tab

## **School Athletics**

HS Varsity Lacrosse (2015 - 2018), Team Captain (2018)

HS Junior Varsity Football (2015) | HS Varsity Nordic Ski (2016)

# **Honors and Awards**

Varsity letter in Lacrosse (2015 - 2018) and Nordic Skiing (2016)