Oklahoma City, OK | (405)-926-1991 | Email: tolycs@outlook.com

### **EDUCATION & CERTIFICATION**

University of Oklahoma (OU): Bachelor of Science, Computer Science – Minor, Math | Expected December 2024

GPA: 3.76/4.0

**Relevant Coursework:** Machine Learning, Parallel, Distributed, and Network Programming, Linear Algebra, Data Structure, Computer Security, Principle Programming Language, Algorithm Analysis, Operating Systems, Software Engineer, Computer Architecture, Computer Organization, Ordinary Differential Equations, Applied Statistical Methods, Numerical Analysis.

Licenses & certifications: Technology Summer Engagement Program at Paycom

### **EXPERIENCE**

## Summer Engagement Program, Paycom | Oklahoma City, OK

06/2023 - 07/2023

- Application Security: Conducted thorough security assessments and penetration testing on web-based applications to identify vulnerabilities and mitigate risks, utilizing tools such as Burp Suite and OWASP ZAP, resulting in strengthened security posture and reduced potential for exploitation.
- DBA SQL: Led initiatives at Paycom to optimize database performance and streamline operations. Addressed challenges such as lack of Enterprise Data Tools, high DML and reporting demands. Implemented solutions for modular client opt-ins, non-standard workloads across shards, and large dataset management. Managed code agility, ticket management, and data shipping for efficient operations. Proactively handled database growth while maintaining performance standards.

# CellphoneS, Viet Nam

01/2018 - 06/2019

- Worked as a sales manager at a mobile store, training incoming staff about the product, procedures, culture, and practices.
- Excelled in a team environment and effectively resolved customer complaints.
- Contributed to the development of a new feature for the Android open operating system software by coding and testing new functionality in the custom ROM.

### **PROJECT**

## Frozen Lake Game (OpenAI)

01/2024

- Implement two distinct reinforcement learning algorithms, SARSA and Q-learning to compare their performance.
- Utilized Python programming language and relevant libraries to build and train the reinforcement learning models.
- Conducted thorough experimentation and analysis to evaluate the effectiveness and efficiency of each algorithm in achieving the game's objectives.
- Find the methodologies, troubleshoot challenges, and refine strategies for optimizing algorithm performance.

### Parallel Encryption and Decryption Implementation on High-Performance Computing Platform

02/2024

• Leveraged OpenMP, GPU and MPI to implement an embarrassingly parallel pattern for encrypting and decrypting data, utilizing a supercomputer at OU for high-performance computing requirements.

# **Tetris Game Development Project**

05/2023

• Developed multiplayer Tetris game with login page for secure user authentication and simultaneous two-player gameplay by using Python.

### **TECHNICAL SKILLS**

**Programing language:** Java, C, C++, Python, Scheme, HTML, CSS, Javascript, Assembly programming language. **Tools:** Docker, Git, GitHub, Eclipse, Visual Studio, Visual Studio Code, R Studio, NetBeans, Xcode. Matlab, DrRacket.

### HONORS AND ACTIVITIES

- Achieved Gallogly College of Engineering Dean's Honor Roll Spring and Fall 2023 at OU
- Received Transfer Academic Excellence Scholarship at OU
- Received Mote Endowed Engineering Scholarship at OU
- Achieved President's Honor roll 4 semesters at Rose State College