

Thomas Rooney

(763)-688-1516 | tomjamesrooney@gmail.com

EDUCATION

University of Minnesota Twin Cities - *B.S. Computer Science*

GRADUATED: May 2021

- GPA: 3.399
- Upper Division Track: Software Engineering

TECHNICAL SUMMARY

GITHUB: <https://github.com/ThomasJRooney>

PORTFOLIO WEBSITE: <https://thomasjrooney.github.io/>

PROGRAMMING LANGUAGES | *Java, Python, C, C++, SQL, TypeScript, JavaScript, CSS, HTML5, OCaml, Ruby, Perl, R, Bash, x86 Assembly*

TECHNOLOGIES | *Git, GitHub, BitBucket, Jira, Angular, Agile, ExpressJS, NodeJS, MongoDB, MySQL, Heroku, AWS EC2, Linux, Slack, Teams*

EXPERIENCE

Software Engineer Intern – *Infinite Campus*

June 2020 – May 2021

- Developed new activity registration product for various school districts throughout the united states
- Created hundreds of automated unit and integration tests to ensure product quality
- Worked in collaboration with a remote agile team
- Java, SQL, HTML, TypeScript, Angular, Git, BitBucket, Teams

Linux System Administrator – *University of Minnesota, College of Science and Engineering*

July 2019 – May 2020

- Debugged the college's quota management system and refactored the REST API
- Developed automation scripts for increasing the efficiency of systems
- Python, Perl, Ruby, Bash, Github, Slack

Personal Growth Journal Web Application – *Personal Project*

- Designed, developed, tested, and deployed this system to track my goals, habits, and personal growth
- NodeJS, ExpressJS, MongoDB, JavaScript, HTML, CSS, Bootstrap, AWS EC2, Heroku
- Code base: <https://github.com/ThomasJRooney/Grojo>
- Live application: <https://grojo.herokuapp.com/>

Machine Learning Stock Trading System – *Neural Networks Class Project*

- Designed and developed a system that uses machine learning to trade stocks profitably based on historical data
- Python, Matplotlib, Pandas, TensorFlow, Keras, Long Short Term Memory Artificial Recurrent Neural Network
- Code base: <https://github.com/ThomasJRooney/MachineLearningStockTrading>

Sorry! Artificial Intelligence Simulation – *Artificial Intelligence Class Project*

- Implemented the popular artificial intelligence algorithm Monte Carlo Tree Search to play the board game Sorry!
- Wrote an original research paper based on the results of 10,000 simulated games
- Java
- Research paper: https://github.com/ThomasJRooney/SorryAISimulation/blob/main/AI_Research_Paper.pdf
- Code base: <https://github.com/ThomasJRooney/SorryAISimulation>

Vote Aggregation System – *Software Engineering Class Project*

- Implemented a graphical user interface for customer ease of use
- Designed, developed, debugged, and tested this system with a four-person team implementing the agile methodology
- Java, HTML, Spring, Java Docs, JUnit
- Code base: <https://github.com/ThomasJRooney/VoteAggregationSystem>

LEADERSHIP AND AWARDS

First Year Leadership Member – Perfect Attendance Award – *University of Minnesota*

2018

Varsity Hockey Captain – *Buffalo High School*

2015- 2017

LINKEDIN | <https://www.linkedin.com/in/thomasjamesrooney/>