Thomas J. Rooney
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Education:

- University of Minnesota, College of Science and Engineering, 2017-2021
  - Computer Science B.S.
  - GPA: 3.399

Relevant Work Experience:

- Software Engineering Intern, Infinite Campus, 2020-2021
  - Worked on multiple tasks, bug fixes, and enhancements for a system that allows school districts to build activities and eligible students to register for a given activity
  - Created automated tests for the activity registration systems code base
- Linux System Administrator, UMN CSE-IT, 2019-2020
  - Automation of system-wide tasks utilizing python, perl, ruby, and bash scripts
  - Rewrote API and frontend for the UMN CSE-IT quota management system
  - Created script and cron job to automatically repopulate CSE email lists

Projects:

- Productivity Journal Web Application:
  - An intuitive app that allows a user to set goals, track habits, and visualize their personal growth data in a simple and effective way
  - AWS EC2, MongoDB, Express, Node.js, Heroku, Chart.js, EJS
  - https://grojo.herokuapp.com/ (The codebase has sensitive information in it)
- Machine Learning/Algorithmic Trading Robots:
  - Created a machine learning trading robot that uses a long short term memory neural network to predict stock prices and trade profitably from the prediction
  - Created multiple algorithmic trading robots that make calculated decisions based on data
  - Python, Quantopian, Pandas, NumPy, Matlab, Jupyter, Alpaca API, sklearn, keras
  - https://github.com/ThomasJRooney/TradingStocks
  - https://github.com/ThomasJRooney/Trading-Robot
- Simple Database Management System:
  - A custom relational database with standard SQL commands
  - Java
  - https://github.com/ThomasJRooney/Simple-Database-Management-System
- Discrete Event Simulation:
  - A Minneapolis bus route simulation in order to gather and synthesize data on the optimal amount of buses that should be running to maximize passenger miles per gallon and minimize average travel time
  - Java, Priority Queue
  - https://github.com/ThomasJRooney/Discrete-Event-Simulation
- Turtle Adventure Game:
  - An interactive adventure game utilizing a GUI and object-oriented design
  - Python, Tk-inter module, Turtle Graphics
  - https://github.com/ThomasJRooney/turtleadventuregame/blob/master/turtlegame.py

Relevant Skills:

- Python, Java, C/C++, OCaml, Ruby, Perl, HTML, JavaScript, R, Bash, TypeScript
- Angular, Bit Bucket, Jira, AWS EC2, MongoDB, Express, Node.js, Heroku, Git, Github, Linux/Unix, SQL, Puppet, gdb Debugger

Activities/Honors:

- Two Year Captain of Varsity Hockey, 2015-2017
- Three Year All-Academic team, Soccer, Hockey, 2014-2017
- Selected for First-Year Leadership Group, Perfect Attendance Award, 2018