

JOHNATHAN O'NEAL

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[Linkedin](#) | [Github](#)

EDUCATION

Master of Science in Mathematics Dec 2021 - May 2023
Tufts University, Medford, MA

Bachelor of Science in Mathematics, Summa Cum Laude Sep 2018 - Dec 2021
Tufts University, Medford, MA

- Activities: Varsity Football Team, Student Athlete Advisory Committee Team Representative
- William Campbell Trophy Semi-Finalist (Awarded to the NCAA football player with the best combination of academics, community service, and on-field performance)
- NESCAC All-Sportsmanship Team, NFF Hampshire Honor Society, 4x NESCAC All Academic Team, Academic All-District New England

EXPERIENCE

Data Engineer Jul 2023 - Present
Lightkeeper LLC, Boston, MA

- Developed standalone Jupyter web apps to streamline internal processes, including a command line toolkit for client facing personnel, automated data onboarding tests, Zendesk ticket analytics, and data validations
- Implemented a full-stack local RAG chatbot using Llama CCP, Llama Index, Postgres, PGVector, and Gradio for documentation queries, as well as legacy code generation and refactoring
- Executed a complete lift and replace code migration for four clients, developing data frame differencing tools to ensure accuracy across millions of rows of data and different aggregation strategies
- Optimized our portfolio simulation program, reducing runtime by 800% and adapting testing programs for compatibility
- Day to day tasks include managing client specific end-to-end ETL pipelines, ensuring data integrity, efficient processing, implementing business logic, and creating custom data projects

PROJECTS

Personal Website - HTML, CSS, Markdown, Jekyll, GitHub Pages

- Designed and implemented a personal portfolio using GitHub pages ([website](#), [source code](#))

HAL 9000 - Python, Mechanical Soup, Pandas, Scikit-Learn

- March Madness model scoring the highest win percentage in the Tufts National Data Science Student Corps (NSDC) machine learning challenge and undefeated against friends and family for two years

SKILLS

- Programming Languages & Tools: Python, SQL, C++, Git, Jupyter Notebooks, HTML/CSS
- Data & Machine Learning: ETL pipelines, Pandas, Scikit-Learn, PyTorch, Llama / LangChain frameworks
- Frameworks & Methodologies: Agile, RESTful APIs, database management, trunk development