Nathan Johnson

Chicago, Illinois | njohnson14@luc.edu | 331-229-1644 | GitHub | LinkedIn

Education

Loyola University of Chicago Chicago, IL
B.S. Computer Science Expected Graduation: May 2026
GPA: 3.94
Relevant Coursework: Data structures and Algorithms, Discrete Math, Calculus I & II, Linear Algebra, Computer Systems, Programming languages.
Future Coursework: Operating Systems, Object-Oriented Design, Database Programming, NLP, ML

Experience

Argonne National Laboratory
Lemont, IL
Computational Research Aide | Sophomore May 2024 – August 2024

- Analyzed large-scale datasets on HPC clusters, leveraging Python (Pandas) for data wrangling and exploratory analysis, generating insights to guide performance optimizations.
- Helped develop automated data pipelines within an HPC environment, streamlining ETL workflows for large-scale scientific computations.
- Conducted testing and validation routines (cProfile, unit tests) to ensure accuracy and reliability across distributed data flows.
- Leveraged HPC concurrency tools (OpenMP, mpi4py) to optimize pipeline performance; gained valuable insights into system scalability and distributed data handling.

Computational Research Aide May 2023 – August 2023

- Investigated concurrency improvements (OpenMP, mpi4py) for data processing tasks, reducing compute times on HPC nodes.
- Documented pipeline design decisions and results, promoting best practices in data engineering and HPC automation.

TrueLayer
London, UK
Business Development Intern January 2025 – Present

- Analyzed partner and market data using Python and basic visualization libraries (matplotlib, seaborn).
- Collaborated with technical teams to explore leveraging AI insights for predictive financial modeling.

Loyola University of Chicago
Chicago, IL
Loyola AI Club President August 2023 – December 2024

- Led club projects focused on data extraction, preprocessing, and basic ML model training (TensorFlow/scikit-learn).
- Organized workshops on data wrangling (Python, SQL), pipeline automation, and fundamental MLOps concepts (CI/CD for ML).
- Oversaw version control with Git, implementing branching and code review processes to maintain code quality.

Skills

- **Programming/AI:** Python (NumPy, Pandas, scikit-learn), SQL, C++
- **ML/AI Frameworks:** PyTorch, TensorFlow (basic),
- **Data Engineering:** ETL processes, data pipelines, concurrency (OpenMP, mpi4py), HPC workflows
- **Tools/Platforms:** Git, Docker, AWS, Spark/Hadoop (basic exposure)
- **Data Visualization:** Tableau, matplotlib, seaborn