Nathan Johnson

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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, Machine Learning

Experience

TrueLayer
London, UK
Business Development Intern January 2025 – Present

- Conduct data-driven market analyses and generate actionable insights for the Commercial division, focusing on Pay by Bank, Open Banking, and A2A solutions.
- Collaborate cross-functionally to support strategic partnership initiatives, honing communication skills applicable to large-scale distributed system discussions.

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

- Led a team in building a movie recommendation system using Pandas, NumPy, and Scikit-learn, showcasing strong data analysis, machine learning, and collaborative coding capabilities.
- Organized weekly workshops, coding competitions, and speaker events, growing membership engagement and refining leadership skills in a project-based environment.

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

- Contributed to the ARCHES project (CPS division), focusing on GPU offloading with SYCL for performance-critical applications on the Aurora supercomputer.
- Performed code profiling and bottleneck analysis using MAQAO, identifying optimizations to boost computational throughput in a parallel and distributed context.
- Used OpenMP threading to parallelize workflows, collaborating with cross-functional HPC teams under agile development cycles.

Computational Research Aide May 2023 – August 2023

- Developed Python-based HPC workflows, employing cProfile for code optimization and mpi4py for parallel processing, aligning well with Amazon's large-scale, distributed technology ecosystem.
- Integrated C/C++ libraries via ctypes and pybind11, enhancing performance-critical tasks and fostering an understanding of low-level optimizations and scalable architectures.

Skills

- Programming Languages & Tools: Python, C++, Java, Scala, Ruby Pandas, NumPy, Scikit-learn, cProfile.
- Core CS Concepts: Object-Oriented Design, Algorithms, Data Structures, Operating Systems