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

Argonne National Laboratory

Lemont, IL

Computational Research Aide | Sophomore

May 2024 – August 2024

- Pioneered HPC workflows for the ARCHES project, integrating Python with C/C++ libraries via pybind11 and ctypes for distributed computations.
- Employed OpenMP and SYCL to optimize GPU offloading, reducing execution times by up to 30%.
- Documented key findings and deployment practices, enhancing clarity for broader technical teams and facilitating knowledge transfer.

Computational Research Aide

May 2023 – August 2023

- Developed large-scale data pipelines using Python and mpi4py, aligning with modern microservices and data analytics paradigms.
- Analyzed performance bottlenecks via MAQAO, implementing solutions for high-throughput HPC environments.
- Collaborated in an agile setting, iterating on deliverables through sprints, stand-ups, and stakeholder feedback.

TrueLayer

London, UK

Business Development Intern

January 2025 – Present

- Collaborate with internal teams to prototype new fintech solutions, applying React and TypeScript concepts to build proof-of-concept UIs.
- Draft technical proposals for client integrations, bridging the gap between business requirements and cloud-based deployments

Loyola University of Chicago

Chicago, IL

Loyola AI Club President

August 2023 – December 2024

- Led a team to design a movie recommendation system using NumPy, Pandas, and Scikit-learn, demonstrating machine learning fundamentals and agile project management.
- Organized weekly workshops, coding events, and speaker sessions, growing membership and cultivating an inclusive, knowledge-sharing environment.

Skills

- **Programming Languages:** Python, Java, C++, Ruby, Scala
- Web & App Dev: React, Node.js, basic familiarity with Angular
- Cloud & Databases: Introductory experience with AWS (EC2, S3, VPC), HPC concepts, NoSQL & relational databases