**Nathan Johnson**

Chicago, Illinois | [njohnson14@luc.edu](mailto:njohnson14@luc.edu) | 331-229-1644 | [GitHub](https://github.com/nathanjohnsongithub) | [LinkedIn](https://www.linkedin.com/in/nathan-johnson-compsci/)

**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

* Contributed to the ARCHES project under the CPS division, focusing on GPU offloading with SYCL to optimize performance on the Aurora supercomputer.
* Analyzed code performance using MAQAO and implemented targeted optimizations for computational kernels, reducing execution time and improving scalability.
* Employed OpenMP to parallelize workloads, demonstrating proficiency in concurrency and performance tuning.

*Computational Research Aide*  May 2023 – August 2023

* Developed Python-based HPC workflows for the CPS division, integrating C/C++ libraries through ctypes and pybind11.
* Performed benchmarking using cProfile and optimized parallel computation via mpi4py, resulting in improved performance of data-intensive tasks.
* Gained hands-on experience in cross-language performance optimization and parallel programming in distributed computing environments.

**TrueLayer**  London,UK  *Business Development Intern* January 2025 – Present

* Acquired experience in a fast-paced FinTech environment; performed data analysis and outreach within the Commercial division.
* Conducted research on potential strategic partnerships, developing analytical and communication skills beneficial for cross-functional software development projects.

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

* Led a project building a machine learning system to recommend similar movies based on user viewing history using Pandas, NumPy, and Scikit-learn.
* Organized weekly meetings and competitions, growing membership from 5 to 25 regular attendees.
* Oversaw logistical planning for guest speaker events, demonstrating leadership, team collaboration, and project management skills.

**Skills**

* **Programming Languages & Tools:** Python, C++, Java, Scala, Ruby, Git, PyBind11, cProfile, Pandas.
* **Software Development:** Object-Oriented Programming, Data Structures & Algorithms, Complexity Analysis, Unit Testing