

Daniel Johnson

[linkedin.com/in/danielrjohnson00/](https://www.linkedin.com/in/danielrjohnson00/) | github.com/DanielRJohnson | danielrjohnson.dev
danielrjohnsonprofessional@gmail.com | (913)-231-9212

PROFESSIONAL EXPERIENCE

Post-Master's Researcher

Los Alamos National Laboratory

May 2023 – Present

Los Alamos, NM & Remote

- Improve Continuous Integration (CI) infrastructure for the automated building and testing of multi-physics simulations
- Contribute software engineering design and development to the open-source LANL Data Science Infrastructure project
- Gear innovations in project work towards the goal of publishing papers in top venues

Graduate Research Assistant & Graduate Teaching Assistant

University of Kansas School of Engineering

August 2022 – May 2024

Lawrence, KS

- Conduct research in the intersection of high-performance computing (HPC) and machine learning (ML) (Spring 2024)
- Give lectures on Pandas and Deep Learning for EECS 835: Advanced Data Science (Fall 2023)
- Direct lab sections and grade assignments for 80+ students in EECS 268: Programming 2 (Fall 2022, Spring 2023)
- Was awarded the Paul F. Huebner Memorial Award for excellence in teaching

Software Development Intern

Paycom

May 2021 – August 2022

Oklahoma City, OK

- Worked with a team to develop an internal tool that parses documentation from 90,000+ source files and uploads formatted documentation to an internal site using a REST API
- Wrote unit and integration tests to systematically verify implementation correctness achieving 100% test coverage
- Presented the project to the CIO and other development management to show usage and monetary value

EDUCATION

University of Kansas

Master of Science in Computer Science

Lawrence, Kansas

May 2024

- GPA: **4.00/4.00** | Thesis Title: *Probability-Aware Selective Protection for Sparse Iterative Solvers*

University of Kansas

Bachelor of Science in Computer Science

Lawrence, Kansas

May 2022

- GPA: **3.74/4.00** | Upsilon Pi Epsilon Honors Society (Top 30% of Class) | Niehaus Award for Best Capstone

LEADERSHIP EXPERIENCE

Vice President and Co-Founder

KU Artificial Intelligence Organization

February 2021 – May 2024

Lawrence, KS

- Manage and work on team-oriented projects using applied artificial intelligence, run weekly meetings, help with organization funding and campus relations, and present informative workshops on the fields of AI and ML

PROJECTS

MatProp | *Python*

Spring 2023

- Compact backpropagation engine and neural network framework that provides a PyTorch-like interface for defining and training neural networks using autograd-supported matrix operations
- Thoroughly tested against PyTorch to ensure that its calculations of values and gradients are correct

MOBIUS | *Python*

Spring 2022

- Full data pipeline for training machine learning models to classify user keystrokes based on gyroscope and accelerometer sensor data on an Android device, presented with an eight page research paper
- Employs asynchronous polling of sensors, data processing with NumPy and Pandas, and uses a Tensorflow RNN model

TECHNICAL SKILLS

Languages/Tools: Python, C++, Go, Rust, C, JavaScript, C#, Haskell, SQL, Bash, Git, Gitlab CI/CD, Docker, Jupyter

Libraries/Frameworks: NumPy, Pandas, Tensorflow, PyTorch, CUDA, Scikit-Learn, Matplotlib, Seaborn