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| **Caleb Erickson**  (615)-594-8664 | <crerickson@crimson.ua.edu> | [caleberickson21.github.io](https://caleberickson21.github.io) | [linkedin.com/in/-caleb-erickson](https://linkedin.com/in/-caleb-erickson) | | | |
| **Education** | | | |
| **Master of Business Administration, Concentration in Business Analytics**  *The University of Alabama, Tuscaloosa, AL* | | | *August 2023 - May 2027* |
| **Bachelor of Science in Computer Science**  *The University of Alabama, Tuscaloosa, AL* | | | *August 2023 - May 2026* |
| * GPA: 4.0/4.0 * STEM to MBA Program | * Most Outstanding Junior * President’s List | * Honors College |  |
| **Skills** | | | |
| * **Languages:** Python, C++, C, Javascript * **Databases:** PostgreSQL, SQL Server, MongoDB, Cosmos DB, Milvus, Neo4j * **Tools:** Git, AWS, Azure * **Frameworks:** Flask, React.js, Next.js, Node.js * **Libraries:** NumPy, Pandas, Matplotlib, Scikit-learn | | | |
| **Experience** | | | |
| **Alabama Artificial Intelligence Institute**  **AI & ML Research Intern** | | | *May 2025 - Present* |
| * Built autonomous pipeline to integrate 5 multidomain, federal datasets into single, 40K node knowledge graph * Developed an RAG framework integrating vector embeddings, LLMs for NLP, and knowledge graphs to reduce hallucinations in model output * Engineered a full-stack web-application to enhance AI data storytelling, used across 6 UA and UMBC classes * Supported an AI-driven infographic generation application for flood preparation, integrating social media, socioeconomic, and weather data in an RAG pipeline for contextualized outputs * **Tools:** Azure, Python, LLMs, RAG, Knowledge Graphs, NumPy, Pandas, Matplotlib, Scikit-learn | | | |
| **Projects** | | | |
| **Mockstreet Stock Exchange***,* [*mockstreetexchange.com*](https://mockstreetexchange.com/) | | | *March 2025* |
| * Developed a mock stock exchange platform that enabled users to simulate trades and manage portfolios with real-time data via the Yahoo Finance API * **Tools:** AWS, PostgreSQL, React.js, Node.js, Yahoo Finance API | | | |
| **Number Prediction Neural Network***,* [*numbers-beige.vercel.app*](https://numbers-beige.vercel.app) | | | *April 2025* |
| * Designed and trained a custom convolutional neural network to recognize handwritten user input digits on a browser-based 28x28 grid, achieving a 96.4% accuracy on the MNIST dataset * **Tools:** Python, Numpy, Flask, React.js, Axios | | | |
| **Portfolio with All Projects***, caleberickson21.github.io* | | | |
| **Publications** | | | |
| * *Enhancing Flood Risk Communication through Semi-Automated Ontology Framework,* **Water (Hydrology Special Issue)** - under peer review * Unifying Flood-Risk Communication, **Hydrology**, 12(8), 204 - [*doi.org/10.3390/hydrology12080204*](https://doi.org/10.3390/hydrology12080204) | | | *August 2025*  *August 2025* |
| **Involvement** | | | |
| * Alabama AI Club*, Developer and Executive Officer* * Alabama Software Development Club*, Member* | | | *August 2024 - Present*  *August 2023 - Present* |