MICAH KEPE

Email: micahkepe@gmail.com
GitHub: github.com/micahkepe

LinkedIn: linkedin.com/in/micah-kepe
Website: micahkepe.com

EDUCATION

Rice University, Houston, TX
Expected May 2026
Bachelor of Science in Computer Science, Minor in Data Science
GPA: 3.94 / 4.00
Relevant Coursework: *Computer Engineering, Practical Machine Learning, Computer Systems, R for Data Science, Tools for Data Science, Concurrent Program Design, Data Structures & Algorithms, Mathematical Cryptography, IoT Programming, Game Design, Quantum Computing, Multivariable Calculus, Linear Algebra, Probability and Statistics, Discrete Mathematics, Compilers*

PROFESSIONAL EXPERIENCE

Machine Learning Research Intern, Vislang Lab, Houston, TX
Feb 2024 – Aug 2024

- Major contributor to a 40M+ image repository for open-source research, enabling the development of advanced multimodal datasets for ML applications.
- Implemented and evaluated CLIP-based models for zero-shot image classification, reproducing state-of-the-art results on ImageNet without task-specific fine-tuning.
- Built interactive, web-based demos for publications (e.g., SCoRD) to visualize autoregressive visual relationship prediction models, increasing accessibility for thousands of site visitors.

Software Development Intern, King Energy, Durango, CO
Jun 2023 – Aug 2023

- Improved operational efficiency by 30% by designing and delivering an intelligent document navigation and bundling tool
- Spearheaded a RESTful backend using Node.js, integrating Google Drive API, Prisma ORM, and Salesforce CRM for seamless data exchange.
- Collaborated on a cross-functional team, leading code reviews and agile iteration cycles to ensure scalable, high-quality software delivery.

PROJECTS

OwlDB: Lightweight NoSQL Database | *Go, Concurrency, REST API, Skiplist Indexing*

- Designed and implemented a modular NoSQL document store in pure Go with real-time updates via Server-Sent Events (SSE).
- Engineered concurrent skiplist indexing with lazy synchronization and hand-over-hand locking for efficient, thread-safe read/write operations.
- Built JSON schema validation, token-based authentication, and a patch system with optimistic retries and atomic upserts.

Vimtutor Sequel | *Bash, Vimscript, Ruby, Homebrew*

- Created a CLI extension to `vimtutor` with 8 new tutorials on macros, registers, and plugin workflows.
- Reached 500+ GitHub stars and featured on the Hacker News front page.
- Managed global contributions with Git best practices; accepted into Homebrew-Core.

LEADERSHIP & ACTIVITIES

Admissions Interviewer, Rice University
Sep 2024 – Present

- Selected as one of 36 interviewers (from 250+ applicants) to assess prospective students through structured behavioral interviews.

Academic Mentor, Rice University
Aug 2023 – Present

- Conduct weekly review sessions and workshops for 50+ students in data structures, algorithms, and systems programming.

TECHNICAL SKILLS

Machine Learning: PyTorch, TensorFlow, Computer Vision, Natural Language Processing, NumPy, Pandas
Programming Languages: Python, Java, JavaScript/TypeScript, C/C++, SQL, Go, Rust, R
Tools & Technologies: AWS, Git, Docker, CI/CD, Kubernetes, PostgreSQL, Firebase, Linux/Unix, LaTeX