Michael 'Mike' Davis

INNOVATION LEAD · AI DEVELOPER · RESEARCHER · GENERALIST

Huntsville, Alabama | UTC -5 ±6

Experience ____

Innovation Lead Huntsville, AL

ARCARITHM "ARCHITECTURE + ALGORITHM"

2022 - Present

- Lead new product development of self-hosted Large Language Model (LLM) Al Assistant application suite for privacy-concious businesses. Deploy company products to internal and external early adopter customers (including Fortune 500). Develop new LLM-enabled features for the Al Assistant application including text, image, agentic, multimodal, and workflow application features.
- Coordinate development of company research portfolio by organizing development teams, pioneering new product concepts, exercising thought leadership, organizing research efforts, and publishing market research.
- Write proposals, supporting \$5B new business acquisition pipeline. Conduct business development meetings, briefings, demonstrations, and represent company at conferences.
- More Hats I Wear: Company Open Source SME, Full Stack Artificial Intelligence Engineer, AI Lab Cluster Manager, Nextcloud Administrator, AWS Administrator, Linux Sysadmin, Project Manager, Proposal Writer, Business Developer, Company Liason to Technology Vendors, New Hire Mentor

Technology Solutions Specialist, Linux System Administrator

Huntsville, AL

DYNETICS 2020 - 2022

Lead development of operating system integration modules supporting autonomous systems. Developed customized hypervisors.

Pharmaceutical Researcher

Birmingham, AL

EVONIK BIRMINGHAM LABORATORIES

2018 - 2020

Collaborated with a cross-functional team to conduct experimentation, analysis, and scale-up of injectables for clinical trials.

Projects

LLM Creative Studio Platform for Autonomy Enthusiasts and Researchers

DESIGNER/BUILDER 2024 - Present

Self-hosting AI systems comes with many benefits; by designing and building an affordable, long-term, sustainable, on-premise LLM inference workstation for development, agentic research can be accelerated by lowering compute cycle costs. Goal is to be competitive with NVIDIA DIGITS and Framework Desktop over a longer time horizon via PCI-based chipsets.

Zero to Hero

MENTOR 2023 - Present

Personally teach and mentor underserved urban and rural undergraduates providing an introduction to typing, the terminal, and Linux operating systems

Simonides

DESIGNER/DEVELOPER 2021 - 2022

Developed a personal finance assistant that uses post-modern portfolio theory and monte-carlo simulations to help optimize my 401(k) portfolio using python, numpy, pandas, matplotlib, and yfinance.

Skills and Super Powers .

Super Powers Risk Taker, Connecting Dots and People, New Product Development, Insight Engine

Languages Python, Bash, Javascript, HTML/CSS/HTMX, Markdown, SQL, Java

Spoken Languages English, "Business Development", Spanish

Programs/Libraries FastAPI, LangChain/LangGraph, Neovim/vi, Docker, Nextcloud, Excel, Word, Powerpoint

Education

University of Virginia Charlottesville, VA