



# Adam Mischke





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#### SUMMARY

Strong work ethic Full-stack Engineer that learns quickly, is a committed team player, and leads junior developers. Has 4-years of startup experience working in an agile and TDD environment. Served 6 years in the United States Navy as a Network Administrator.

## **EDUCATION**

#### Middle Tennessee State University

Murfreesboro, Tennessee

Bachelor of Science - Computer Science; Minor in Mathematics

July 2014 - June 2018

Awards / Memberships: Dean's List 2014-2018, Member of Association of Computing Machinery (ACM), Member of the Upsilon Pi Epsilon

 $Computer\ Honor\ Society$ 

#### SKILLS

• Languages: Python, Swift, JavaScript, Typescript, C++, SQL, Bash, Solidity

• Frameworks: Django, Flask, NodeJS, React, SwiftUI

• Tools: Docker, Terraform, GIT, PostgreSQL, Fastlane, Truffle, Ganache, Hardhat

• Platforms: Mac, Linux, Web, iOS, AWS, GCP, Firebase, Github, Datadog, Sentry, Code Climate, CircleCI

• Soft Skills: Leadership, Problem Solving, Strong Communication, Time Management

#### EXPERIENCE

## FunFunFun Inc. - Gen Z Dating

Full-stack Engineer (Full-time)

Remote

May 2020 - June 2022

• First Engineering Hire: Subject Matter Expert on a live updating video dating app that integrated with TikTok with over 10,000 users, where users could like, match, and message each-other.

Backend: Built a Django and GraphQL REST API and a matching algorithm to pair users together with alike parameters.
 Created a series of Firebase, Firestore, and Google Storage Typescript triggers to create a video processing pipeline that asynchronously cut over 8,000 videos.

• Frontend: Deployed a complete SwiftUI iOS app from the ground up to app store. Contributed to an internal Typescript React webpage to police uploaded media and content used by admins.

• DevOps: Used GitHub actions to create an CI/CD pipeline for testing and deploying the backend and iOS using fastlane for multiple environments.

# Coinmine - Crypto Mining Made Easy

Remote

Software Engineer (Full-time - Part-time)

May 2018 - Current

• First Engineering Hire: Built a plug-and-play cryptocurrency miner that mined 6 different cryptocurrencies 24/7, that a user could control with their iOS or Android phone.

mineOS: Built and maintained mineOS, an Arch Linux-Based Operating System, onto a small form factor computer. Fabricated
the build and deployment tools for distributing mineOS images through a test and build pipeline to remotely update over 5,000
miners.

• Backend: Used Agile, Extreme Programming and Test Driven Development methodologies to deploy, update, and configure a Django based REST API with over 10,000 users. Created programmatic reports to calculate all accounting owed and owned.

 DevOps: Arranged and operated analytical, deployment, and pipeline tools such as: CircleCI, Code Climate, Datadog, and Sentry.

• **Communication**: Worked with overseas distribution centers in China to construct and create Standard Operating Procedures (SOP) for assembly and manufacturing.

#### Caterpillar Financial Services Corporation

Information Services - Network Team (Intern)

May 2017 - July 2017

• Leadership: Led research, meetings, and recommended the replacement of a network team application. Worked as liaison between team members and company solutions, then sought out quote to be implemented into the yearly budget.

• **Problem Solving**: Researched and developed a web dashboard that displayed global network information with Python and Flask using a SQL database. Used JavaScript, J-Query, Bootstrap, AJAX, and Google Charts to form a coherent and simple-to-use website. Implemented a search function that integrated with database calls to speed up information flow.

## United States Navy

Fire controlman (FC2) - Computer and Network Technician (Full-time)

July 2008 - July 2014

- Leadership: Efficiently led as work center supervisor, supervising 8 personnel in accomplishing over 1,634 maintenance actions with a 94% maintenance accomplishment rate, managing 372 maintenance checks and repairs.
- Security Clearance: Held a Secret Clearance and handled the Electronic Key Management System, which managed 106 classified software programs and hardware systems.
- Preventative & Corrective Maintenance: Upkeep and corrective maintenance of the Ship's Self Defense System, Open
  architecture network server and computer systems, Battle Force Tactical Trainer network, and Cooperative Engagement
  Capability LAN.
- Teamwork: Assisted in the successful overhaul of 3 major system installs with lead engineers to include: Hardware, software, and network installation, troubleshooting to the perfection of the system.

## **PROJECTS**

- Vison multimedia search engine (NLP, Search Engine, Web Crawlers, Multimedia Processing): (Work in progress)
  Research oriented, open source, search engine for bringing reverse multimedia search to small & mid scale enterprises. Tech: Python,
  NodeJS, Intel OpenVino Toolkit, Selenium, TensorFlow (October '18)
- Reinforcement Learning based Traffic Control System (Reinforcement Learning, Computer Vision): AI model to resolve city traffic around 50% faster. Tech: Python, Alibaba Cloud, Raspberry Pi, Arduino, SUMO & OpenCV. (August '18)
- Panorama from Satellite Imagery using Distributed Computing (Distributed Computing, Image Processing): Images clicked using drones, provided by ISRO were stitched together using distributed public compute nodes, effectively bringing down processing time exponentially. Tech: PHP, C++, Java, Python (March '18)
- Drag-n-drop machine learning learning environment (Web Development, Machine Learning): Scratch like tool for implementing machine learning pipelines along with built in tutorial for each concept. Tech: Python, JavaScript (September '18)
- Search Engine and Social Network (Web Development, Web Crawler, Search): Created from scratch a social network and a search engine based on the idea of integrating Facebook and Google. The launched website was among top 1000 websites in India during 2012-2013. Tech: PHP, MySQL, HTML, CSS, WebSockets, JavaScript, RSS, XML (May '12)