Trevor Pope

Education

Grand Canyon University (GCU), Phoenix, AZ

Sep 2021 - April 2025

Bachelor of Science in Computer Science – Big Data Analytics Emphasis, GPA: 3.94, Summa Cum Laude, Honors Program, Dean's List

Experience

Software Engineering Intern - USA Managed Care Organization

April 2023 - Aug 2023

- Led Java to Python migration of provider finder, enhancing performance by 15% and improving maintainability.
- Executed data engineering and optimization, integrating Elasticsearch to elevate search relevance.
- Conceptualized a neural-network ranking model utilizing text embeddings to predict search result relevance.

Web Development Intern - Whitepoint Digital

April 2022 - Sep 2022

- Developed responsive websites (HTML, CSS, JavaScript), ensuring cross-browser compatibility across 95%+ browsers.
- Customized WordPress via theme/plugin development for 10+ client needs, enhancing website functionality.
- Contributed to SEO and performance tuning, achieving a 20% improvement in loading speeds.

Projects

Zonaly – Geofenced Screen Time App

Swift, CoreLocation, FamilyControls, ManagedSettings

- Developed an iOS app using geofencing and SwiftUI to restrict app accessibility within defined boundaries.
- Implemented FamilyControls/ManagedSettings to enforce location-based screen time limits.
- Leveraged SwiftUI for a user-friendly interface to manage geofences and app restrictions.

C– Compiler

C, Bison, MIPS assembly

- Architected/implemented a new language, C- (based on C), compiling to optimized MIPS assembly.
- Utilized **Bison** for parsing, generated an **AST**, and performed **semantic analysis** (type checking, scoping).
- Optimized intermediate Three-Address Code using dead code elimination, constant folding, and propagation.

Generative Adversarial Network – Dogs

Python, PyTorch

- Implemented a ProGAN with PyTorch to generate high-resolution dog images from 5,000+ images.
- Applied **progressive growing/gradient penalty** for better generated image quality.
- Demonstrated generation of diverse, high-quality synthetic dog images using ProGAN.

Leadership & Recognition

Grand Canyon University

- Community Events Coordinator (2023 Present): Led 200+ student community engagement events.
- Life Leader (2022 2025): Facilitated weekly Bible studies and community building for 30+ participants.
- Student Leader of the Year Nominee (2024-2025)

Skills

Languages: Python, Java, Swift, C, JavaScript, SQL

Frameworks/Tools: SwiftUI, PyTorch, Firebase, TensorFlow, React, Node.js, Git, Unity, Elasticsearch, MongoDB Specialties: iOS App Development, Compiler Design, Machine Learning, Web Development, Data Engineering