Shanth Koka

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github.com/ShanThatos   LinkedIn

EDUCATION

University of Texas at Austin

B.S. Computer Science Honors (Turing Scholars Program)
B.S. Mathematics
Aug 2020 – Present
Major GPA: 3.92

SKILLS

Languages

Python, Java, TypeScript, SQL, C++, C#, C, x86 ASM, Lisp

Software

Firebase, Spring, Flask, PostgreSQL, Node.js, React, React Native, Heroku, Stripe Payments, Unity, Godot, AR/VR

WORK EXPERIENCE

Product Engineer Intern

Deloitte   **Jun 2023 – Aug 2023**

- Spearheaded the creation of a comprehensive JUnit Test Suite analysis tool for the AppMod Product Team.
- Utilized the tool to collect & analyze over 2500 IMS Java Runtime tests and identify common IMS DB properties such as logical relationships, secondary indices, database types, etc.
- Enabled property-based SQL queries within the tool, streamlining developer testing processes and reducing testing time from 35 minutes to an impressive 30 seconds.
- **Skills:** Java (JUnit, Reflection, Class Loading), Cobol, IMS DB

Frontend Engineer Intern

Aristocrat Technologies   **Jan 2023 – Jun 2023**

- Quickly mastered the codebase & design of Aristocrat's Unity C# Frontend GDK (Game Development Kit) within 2 weeks.
- Designed and engineered an automated Frontend GDK testing framework, effectively streamlining and automating manual testing tasks, and reducing manual labor by 20 hours per week.
- Skillfully developed and presented 5 distinct unit tests showcasing the benefits and efficiency of the new framework.
- **Skills:** C# (NUnit), Unity, MVC Pattern

Software Engineer Intern

Noblis   **Jun 2022 – Aug 2022**

- Developed a robust Python application to autonomously extract business process flows from Microsoft Visio files, resulting in the construction of insightful knowledge graphs.
- Leveraged the tool to analyze 125 Visio documents and 733 Business Process Models.
- Integrated the knowledge graphs with the CMS Knowledge Network, speeding up business process discovery by 80%.
- **Skills:** Python, JavaScript (Next.js, React), Office Open XML, Knowledge Graphs

PROJECTS

TexasMathContests + Randomized Math Test Generator – **GitHub Repo**

- Designed, and independently developed a dynamic full-stack web application to facilitate both in-person and virtual Math & Science Tournaments; successfully engaging 2000+ students from Texas over the course of 4 years.
- Added functionality for managing registration, online payments, email notifications, and real-time results tabulation.
- Created a Math Test Generator to rapidly produce tests for weekly virtual tournaments; hosted >60 virtual tournaments.
- **Skills:** Python (Flask, SQLAlchemy), HTML, CSS, JavaScript (jQuery), Stripe Payments API

Interim – C# Behavioral State Machine – **GitHub Repo**

- Collaborated within a team of six to design and build a captivating 2D story-driven side-scroller platformer game: Interim.
- Implemented a C# based Behavioral State Machine to enhance the variability and complexity of enemy AI in the game.
- **Skills:** C#, Unity, State Machines

WebXR Hand Tracking Piano Demo – **GitHub Repo**

- Leveraged WebXR APIs to craft a modern XR hand tracking demonstration featuring a complete virtual piano experience.
- **Skills:** TypeScript (WebGL, WebXR), GLSL, HTML, CSS