Prathik Anand Krishnan

Personal Summary

I like solving real-world problems, driven by the challenges of optimizing solutions. I enjoy brainstorming designs, patterns, and performance improvements, and take pride in owning tasks and delivering them to the best of my abilities.

TECHNICAL SKILLS

Languages: C++, Python, JavaScript, HTML/CSS

Technologies/Frameworks: MFC, Catch2, Google Test, React, Node.js, Tailwind

Developer Tools: Git, VS Code, Visual Studio, Github, Azure, Eclipse

Database: SQLite, MySQL, MongoDB

Experience

ARUP Sep 2022 – Present

Software Developer - G3

Bangalore

- Working on two C++ feature development for Oasys GSA Finite Element Analysis Structural Software
- Working on Backend C++ APIs and have delivered around 60+ JIRA tickets
- Test-Driven Development (TDD) with Catch2 and Google test frameworks having 97% code-coverage
- Front-end development for sidebars and dialog boxes using Vue 3, HTML/CSS and JS

ATKINS Jan 2020 – Aug 2022

Assistant Engineer

Bangalore

- Python + Tkinter tool to draw, analyse and show results of Retaining Walls, had a adoption rate of 70%
- Astrid tool (HTML/CSS) Was part of the QA/QC team, reported around 7 critical bugs and improved UI
- RMS Project Management Interface PowerBI Tool Improved overall project efficiency by 40%

INFOSYS Feb 2018 – Jul 2018

Systems Engineer Mysore

• Learnt Python, DSA, MySQL and did a mini project to build an e-commerce console application

EDUCATION

BITS Pilani Hyderabad, India

Master of Structural Engineering

Aug 2018 - July 2020

CERTIFICATES

- Mastering critical C++17 skills
- Harvard CS50 Free Computer Science University Course
- Programming with JavaScript
- Advanced React Concepts

Projects

Vanilla Vision: Twin Pricing Engine |C++1/|

August 2024

- Utilized Modern C++ for developing the core logic of input parameters
- Implemented lock-free data structure for Twin pricing engine

ConcurrentCandle: Trading Orderbook Simulation Suite |C++14|

June 2024

- Simulates random order generation to mimic real-time trading activity.
- Leverages the power of multi-threading to process orders in parallel

Black-Scholes Option Pricing Model Web App | Python, HTML/CSS |

August 2024

- Crafted with HTML/CSS, seamlessly integrated into Python, utilizing powerful libraries including NumPy, Streamlit, Matplotlib, and Seaborn.
- Displays both Call and Put option prices using an interactive heat-maps

My personal portfolio Web App | React, JavaScript, HTML/CSS |

September 2024

- A detailed overview of my roles and responsibilities in software development using responsive design
- The web app is hosted on GitHub Pages and leverages automatic deployment through GitHub Actions