PRATHIK ANAND KRISHNAN

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in LinkedIn   ⭘ Github   @ My Portfolio

PERSONAL SUMMARY

Skilled Software Developer with **over 3.5 years** of experience in **Modern C++ and Python**. I thrive in Agile environments, consistently delivering scalable software with strong ownership from concept to deployment. **Driven to expand expertise in building high-performance systems and practical design patterns.**

EXPERIENCE

Software Developer - G3   09/2022 – Present

ARUP – Hyderabad

- Developed **backend features for an MFC application in C++**, implementing custom UI enhancements and resolving **60+ JIRA tickets** to improve functionality and user experience. Applied Test-Driven Development (TDD) with Catch2 and Google Test frameworks, **achieving 96% code coverage**.

- Currently developing a **C++ static library Adapter** by using **Factory Design Pattern**, deployed as an internal **NuGet** package to enable seamless integration between two proprietary applications.

- Collaborating with a **global team spread across 4 different time-zones** and ensuring timely delivery of objectives.

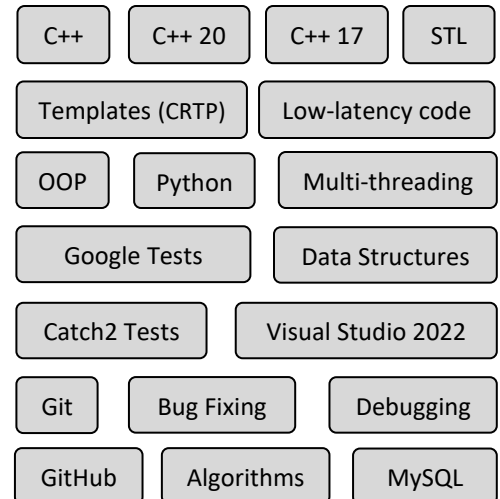**Assistant Engineer**   01/2020 – 08/2022

ATKINS – Bangalore

- Developed a **Python GUI application** using functional programming to design, and analyze structural analysis results, achieving a 70% adoption rate.

PROJECTS

- **Order Execution & Management System to trade on Deribit using C++17:** OEMS is a **High-performance C++17 application** for low-latency interaction with the Deribit test platform, offering **REST API** access to all the crypto symbols and a **WebSocket server** for client subscriptions.

- **VanillaVision - Twin Pricing Engine**: Implemented **lock-free C++ data structure** for pricing engine to do direct comparison between **analytical and simulation results.**

- **ConcurrentCandle - Trading Orderbook Simulation Suite**: Leverages the power of multi-threading to process orders in parallel to **mimic real-time trading activity.**

- **Black-Scholes Option Pricing Model Web App:** Built with Python using NumPy, Streamlit, Matplotlib libraries to display **interactive Call and Put option heatmaps.**

- **Babylon.js 2D Shape Extrusion and Manipulation:** Lets users draw 2D shapes, extrude them to 3D, and manipulate them by moving or editing vertices.

- **My personal portfolio React Web App**: Hosted on GitHub Pages, **leverages automatic deployment through GitHub Actions.**

TECHNICAL SKILLS

C++   C++ 20   C++ 17   STL

Templates (CRTP)   Low-latency code

OOP   Python   Multi-threading

Google Tests   Data Structures

Catch2 Tests   Visual Studio 2022

Git   Bug Fixing   Debugging

GitHub   Algorithms   MySQL

CERTIFICATES

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

EDUCATION

Master of Engg., **Structural Engineering**
BITS Pilani, Hyderabad, India
08/2018 – 08/2020

LANGUAGES

English: ▰▰▰▰▰
Hindi: ▰▰▰▰▰
Tamil: ▰▰▰

SOFT SKILLS

Problem Solving, Continuous Learning, Adaptability, Communication, Flexibility, Collaboration & Teamwork