Niranjan Vasudevan

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Education

University of Western Australia – MSc in Information Technology Feb 2024 – Dec 2025
- CGPA: 5.25/7*

Anna University – B.Eng. in Computer Science Nov 2020 – Jul 2023
- CGPA: 7.67/10

PSG Polytechnic College – Diploma in Information Technology Jul 2017 – Sep 2020
- CGPA: 87/100

Experience

Python and C++ Instructor, *Freelance* – India Feb 2024 – Present
- **Undergraduate Tutoring:** Provided comprehensive tutoring for undergraduate computer science subjects, covering topics like data structures, algorithms, object-oriented programming, and operating systems
- **Tutoring School Students:** Taught programming fundamentals using Python and C++ to passionate students who are new to computer science. focusing on logic building and problem-solving with hands-on coding exercises

Software Developement Intern, Intel Corporation – Bengaluru, India Jan 2023 – Jun 2023
- **Software Engineering:** Developed high-performance, **scalable** C++ applications, optimizing **memory management**, debugging and concurrency control
- **Performance Optimization and Profiling:** Achieved a 13x speed by transitioning from Python to C++ and a 4x boost through multi-threading, utilizing profiling tools to fine-tune efficiency
- **Agile Web Development:** Developed modules for a MERN-stack based application contributing to **full-stack development** with a team of professionals using **JIRA** for sprint planning, fast tracking and project management

Projects

Mini-Lang Transpiler github.com/niranjan-v2/mini-lang-transpiler
- Designed a C11 based source-to-source compiler run-time environment for a mini-language(ml) which has an OCaml-like syntax
- Takes a program written with a .ml extension, transpiles it into C11, validates syntax and compiles it using standard C toolchains for execution
- Supports print, functions, arguments, return and variables

Infrastructure Management System for District Court
- Developed a web-based Infrastructure Management System (IMS) to maintain the account and infrastructure details of the District Court of Tirupur in India.
- The main objective of this project is to digitise all account management related operations and registers to maintain records in the court. This includes managing, generating reports and tracking of properties in the court
- This project was developed using HTML, CSS, Bootstrap, PHP and MySQL

Skills

Languages: C, C++, Java, Python, C#
Libraries and Frameworks: Node.JS, React, Flask