

Arnav Sethi

0481 035 009 | [Website](#) | arnavsingh.sethi@gmail.com | [LinkedIn](#) | [GitHub](#)

Software Engineer building scalable systems across backend, cloud, real-time telemetry, and distributed data pipelines.

TECHNICAL SKILLS

Languages: C++, Python, Java, TypeScript, Bash

Core Systems: Data Structures & Algorithms, Object-Oriented Design, Operating Systems, Computer Networks, Concurrency & Multithreading, Memory Management, Parallel & Distributed Systems

Backend & Data: REST APIs, PostgreSQL, MongoDB, MySQL, pgvector, Redis

Cloud, Tools & Practices: AWS, Google Cloud Platform, Docker, Git, GitHub Actions, CI/CD, Agile/Scrum

PROFESSIONAL EXPERIENCE

Purple Spark

Associate Software Engineer

Product Engineering Intern

Melbourne, Australia

Jun 2026 – Present

Mar 2026 – May 2026

- Architected backend services, APIs, distributed ingestion pipelines, and real-time scoring workflows for a leadership decision-intelligence SaaS, translating ambiguous behavioural-research requirements into production software.
- Reduced research-to-product delivery time by 70% per feature, by building an internal research platform for evidence, behavioural models, scoring logic, and large-scale data extraction, with microservices connecting it to the SaaS.

Monash University

Teaching Associate – Data Structures & Algorithms (FIT1008/FIT2085)

Melbourne, Australia

Jul 2026 – Present

- Teach applied classes in data structures and algorithms, leading students through C++ implementations and structured problem-solving in recursion, complexity analysis, binary search trees, heaps, priority queues, sorting, correctness analysis and linked data structures.

Monash Human Power

Software Team Lead

Software Developer

Melbourne, Australia

Oct 2025 – Jun 2026

Jul 2024 – Oct 2025

- Led a 12+ member software team across 7+ concurrent web, mobile, and embedded projects; defined technical roadmaps, sprint plans, and architecture standards, conducted recruitment, and introduced CI, code-review, and system-level testing practices that reduced integration defects by approximately 20%.
- Engineered and integrated multiple components of a real-time vehicle telemetry system, including ESP32 firmware for 7+ sensor interfaces operating at up to 50 Hz, an Android BLE application, Raspberry Pi display and camera services, MQTT data pipelines, and live cloud dashboards for vehicle testing and race monitoring.

Concept Weavers India

Associate Intern

Noida, India

Apr 2025 – Jun 2025

- Built and deployed 8+ Flask/PostgreSQL REST APIs for inventory and order workflows; optimized schemas and indexes to reduce query latency by 15% while strengthening transaction integrity.

TECHNICAL PROJECTS

Communication Protocol Benchmarking Application ([Live Website](#))

Sep 2025 – Nov 2025

- Engineered a benchmarking platform for MQTT, HTTP, WebSocket, and CoAP with custom endpoints, six network/load scenarios, and weighted scoring for latency, reliability, throughput, jitter, integrity, and resource use.
- Ran 100+ requests per protocol, converting performance data into weighted fitness rankings, protocol recommendations, and comparative dashboards that revealed up to 22% variance under constrained network conditions.

MemoPath – AI-Assisted Dementia Prescreening Tool

Mar 2026

- Built a home dementia prescreening prototype integrating MoCA, RUDAS, and AD8 workflows with automated preliminary interpretation and longitudinal AI cognitive-trend modelling.
- Won 1st place and a \$1,000 prize at MedHack hosted by mlai.au following clinician and industry judging.

SoulStride – LLM-Powered Personal Development Platform ([GitHub](#))

Dec 2025 – Present

- Built and deployed a React Native mobile learning platform that transforms self-development and spiritual texts into structured Duolingo-style lessons, context-grounded RAG coaching, and guided reflection workflows, backed by a Dockerised Node.js/PostgreSQL service on Google Cloud Run.

EDUCATION

Bachelor of Software Engineering (Honours) - Monash University

Jul 2023 – Jun 2027

WAM: 82.9 | Engineering International High Achievers Scholarship