# UDIT SAMANT

**⊘** Ω in

Bachelor of Advanced Computing and Bachelor of Science Computer Science + Computational Data Science The University of Sydney - 72 WAM 2025 Dec Graduation udit.samant@gmail.com www.uditsamant.com +61 434 577 928

#### **SKILLS**

**Programming** - C Programming, C++, Python, Java, SQL, JavaScript, HTML + CSS, PHP, R Programming, Rust, Zig

Frameworks and Libraries <u>Python</u> - SciKit Learn, Unittest, Pandas, Flask, DJango, AysncIO + AsyncHTTP, Uvicorn ASGI; <u>Java</u> - Processing, JUnit, JaCoCo, JavaFX, Gradle; <u>JavaScript</u> - React, Next.Js, Vue, Nuxt 3, HTMX

**Development** - Agile Development, SCRUM, Git, Jenkins, CI/CD, Unit Testing, Black Box Testing **Networking and Security** - Nginx, RestAPIs + CORS + CRSF Protection, Ethical Web Hacking (XSS, CRSF, DOM Clobbering, Command Injection, PHP Attacks)

Systems Engineering - Linux, Bash Scripting, Docker,

Languages - English (Native), Odia (Native), Hindi (Intermediate), Mandarin (Basic)

#### **EXPERIENCE**

OFence, Research Project, The University of Sydney

July 2024 - Present

- Research memory barrier (fences) related bugs in the Linux Kernel.
- Automate conversion of kernel read, write and general barriers to acquire release semantics.
- Automate generation of comments for barriers in cases acquire-release is not possible.

## Data Science Internship, FreeGuides

Oct 2022 - Jan 2023

- Directed the end-to-end process of creating and machine learning models, using Python, and SciKit Learn.
- Utilised Firebase, BigQuery, and Cloud Functions to productionalise models onto the application back-end.

#### **PROJECTS**

## UniTrack, Personal Project % (7)

Jun 2022 - Present

This project won USYD Coding Fest's Best Undergraduate Junior Project

\$2000

- Developed a prototype for the first interactive degree planning web-app for Sydney Students.
- Utilised React, Next.JS, and Vercel to implement validation of degree requirements, drag-and-drop course selection, and a simplified navigation of multiple key pages.

## Crawl, Personal Project % (7)

Jun 2022 - Present

Sydney Computing Society Annual Hackathon Finalist

- An app designed to reduce the friction of planning events with friends.
- Made using React Native, Expo, Pyhon and Google Maps API.

#### EXTRACURRICULARS AND CLUBS

## Technical Events Coordinator, Google Developers Student Club

Jun 2022 - Aug 2023

- Co-directed a technical team of 40+ dedicated to organizing events aimed at introducing students to emerging technologies.
- Successfully led the planning and execution of 4 events, attracting over 700 attendees.
- Presented and demonstrated at an Introduction to Game Development Workshop for 100+ attendees and inspired students to explore creative programming projects at the succeeding Game Jam Competition Event.

#### **Developer Lead**, Sydney Computing Society

Sep 2024 - Present

- Co-lead a team of developers to design and implement systems supporting SYNCS events and infrastructure.
- Maintain and build structures for the society on ASP.NET, NextJS, Docker, SQLCmd, Microsoft Azure.
- Manage basic system administration with VaultWarden, Ventraip, Cloudflare, Notion.

#### Software Developer, Sydney Quant Traders

Sep 2022 - May 2023

- Optimised and developed discord extension to a mock-trading platform.
- Simplified UI using Discord.JS API, to create a trading platform integrated with discord chat, **leading to** increased turnout during mock-trading events.

## SCHOLARSHIPS AND AWARDS

### Vice Chancellor's Mobility Scholarship, The University Of Sydney

Jul 2022

Selected and received a mobility scholarship to represent The University of Sydney as a student ambassador to Nanyang Technological University (NTU), Singapore. Took part in Entrepreneurship, Systems Thinking, Design Thinking, and Cultural intelligence classes at NTU.

Dalyell Mobility Scholarship, The University Of Sydney

Feb 2024 - Jun 2024

New Colombo Plan Mobility Grant, The University Of Sydney

Feb 2024 - Jun 2024

Received \$10,000 from two scholarships to undertake an exchange program at KAIST University, Korea.