Kanay Gupta

Sydney, NSW, 2155 — kanayg@icloud.com — 0480 121 598 — Portfolio Website

EDUCATION

University of New South Wales (UNSW)

February 2023 — December 2025 Bachelor of Computer Science WAM: High Distinction

Achieved Faculty of Engineering Dean's Honours List.

Carlingford High School Graduated: September 2022

High School Certificate ATAR: 98.50

EXPERIENCE

Cluey Learning

High School Tutor

April 2023 - Ongoing

- Tutored students ranging from Year 9 to Year 12 in various concepts from Mathematics Standard to Mathematics Extension 1 resulting in a significant improvement in their academic performance.
- Adapted teaching techniques and approaches to accommodate diverse learning styles and abilities, resulting in increased student engagement and understanding.
- Provided feedback to supervisors on the effectiveness of the provided teaching materials, leading to continuous improvement and refinement of the curriculum.

PROJECTS

Aim and Wall Hacks for CS:GO

- Engineered advanced game hacks using Python-based memory manipulation, leveraging reverse engineering techniques to modify game behavior in real time.
- Developed and integrated multiple advanced features, requiring an in-depth understanding of the game's internal mechanics, memory structures, and event handling.

Portfolio Website - https://kanay2005.github.io/portfolio-website/

- Developed a responsive portfolio website using React.js, Next.js, and Tailwind CSS, optimized image handling, and server-side rendering for improved performance and SEO.
- Designed and deployed a modern, mobile-friendly UI with Tailwind CSS, ensuring fast load times and accessibility, while leveraging Next.js static generation for enhanced scalability and efficiency.

Real Time Tetris Bot

- Developed an AI-powered Tetris bot that detects game blocks in real-time using OpenCV image processing and executes optimal moves via PyAutoGUI keyboard inputs, achieving gameplay speeds faster than any human.
- Implemented advanced computer vision techniques such as edge detection and template matching in OpenCV to recognize falling Tetriminos instantly, enabling near-instant decision-making and outperforming human reaction times.

SKILLS

- Skills: Python, Rust, C, C#, JavaScript, TypeScript, React, Next.js, Tailwind, HTML, CSS, Bash, Linux, SQL, PostgreSQL, Java, LaTeX, Git, Unity, MS Office Suite.
- Languages: Native in English and Hindi.
- General: Strong Decision Maker, Complex Problem Solver, Team Player, Attentive to Detail and Organised.