

Sourojeet Adhikari

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Waterloo, Ontario - N2L 3G1, Canada

EXPERIENCE

• Computer Science Club President

January 2024 - April 2024

President

Waterloo, Ontario

- Directed an organising committee of over 100+ people, and led projects for over 300 club members.
- Helped secure over \$40k+ in funding for new servers to better serve the needs of club members.
- Negotiated over \$5000+ with the UW Math Society to fund events, swag, systems expenses.
- Led the revamp of internal communication channels to better facilitate communication between teams

• Private Tutor

January 2024 - August 2024

Private Tutor

Mississauga, Canada

- Taught C programming, emphasizing low-level concepts and how the computer processes code
- Assisted struggling students in mastering challenging topics, enabling them to improve academically.

• Datacurve

April 2024 - December 2024

Problem Creator

Remote

- Created large sets of competitive programming problems for workers to solve.
- Gamified problem solving, enhancing worker satisfaction by 50%.

EDUCATION

• University of Waterloo

Sept 2024 - Aug 2029

BSc - Mathematical Physics

Waterloo, Canada

PROJECTS

Poisoned Chlorine: Game Engine

December 2021 - Present

Tools: Vulkan, C++, C, CMake, Valgrind, Bash



- * Developed a unique entity management system to suit my wide array of needs.
- * Used Vulkan to render objects to ensure extensibility in the future.
- * Extensively used C++, and related tools to develop the project.

CRender: Ray Tracer

December 2023

Tools: C, C++, Intel One Api, Embree, CUDA, ImGui



- * Implemented dielectrics, and emissive materials, creating stunning visuals.
- * Optimised the rendering pipeline using BVH-Trees, and lazy-evaluation to see massive improvement gains.
- * Worked on analysing performance issues, and deficiencies to properly address.

Wild Space 3 Patched: Stellaris Mod

December 2022

Tools: GIMP, Blender, PDxScript



- * Took over maintenance of the project.
- * Was on Steam Workshop's 'Most Popular' mod for one month straight, and had 3000+ downloads at its peak.
- * Rewrote the system-selection code to meet the demands of the game as updates occurred.

SKILLS

- **Programming Languages:** C, C++, Python, Java, Assembly, Php, Bash, Racket, Scheme
- **Frameworks:** Boost, OpenGL, Vulkan, OneAPI
- **Tools:** CMake, Bash, Valgrind, GDB, Google Test, Git
- **Misc:** Project Management/Planning, People skills, Time Management