

Giovanni Paladino

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EDUCATION

New York University — PhD in Computer Science **Starting** September 2026

Arizona State University — BS in Computer Science — 4.0 GPA May 2026

Relevant Coursework — Computer Systems Security, Computer and Network Forensics, Operating Systems

RESEARCH

ASTeRiSC Research Lab [🔗](#) — **Advised by Professor Adil Ahmad** May 2025 – Current

IsolatedGaming (IsoGame) — **Under Review**

A systems solution for protecting games and players using secure VMs and performant graphics virtualization.

- Designed a **Linux** kernel driver in **C** for bi-directional memory shadowing to share **Vulkan** objects.
- Created **Vulkan** and **OpenGL** applications to intercept API calls for analyzing performance versus **virtio**.
- Present and review detailed technical talks and papers on systems security research in twice weekly meetings.

PROFESSIONAL

Prescio Consulting — **Systems and Network Intern** Oct 2022 – May 2026

- Provided network and server support on **Linux** and **Windows** environments for a remote engineering team.
- Worked with engineering team to design and build servers for Machine Learning and Data Science workloads.
- Utilized **Bash** scripting to diagnose network latency issues affecting remote engineers access to workstations.

PROJECTS

Enhanced Flashlight Glow [🔗](#) — **18,000+ Users and 99% Positive Ratings** Dec 2024

- Leveraged a **Lua** modding API to improve lighting and enhance user accessibility in a popular Steam game.
- Continually iterated the software by quickly responding to user feedback and feature requests.
- Focused on correctness and performance by verifying effects with debuggers and using $O(1)$ data structures.

eBPF Vulkan Tracer [🔗](#) June 2025

- Developed a custom **eBPF** tracer for understanding the **Linux** graphics pipeline by tracing a **Vulkan** program.
- Leveraged **Python** and **eBPF** to visualize the path of syscalls through a user space stack-trace in **Vulkan**.

Home Lab and Cloud Server Hosting [🔗](#) June 2023 – Ongoing

- Deployed headless **Ubuntu** instances and maintain a bare-metal system for serving a variety of services.
- Disassembled and repaired a damaged laptop to use as a headless server running **Linux** and Windows.
- Automated startup, repair, and backups for servers by using **systemd** services with **Bash**.

TEACHING

Teaching Assistant — **Programming Languages** Jan 2024 – May 2026

- Taught groups of 7+ computer science students **C** and **C++** programming twice a week in-person.
- L lectured on technical topics such as pointers, object references, and program memory.
- Supported students one-on-one, teaching coding and debugging in **C** and **C++** with **GDB** and **Valgrind**.

SKILLS

Languages and Libraries: C, C++, Python, Bash, Java, Lua, Javascript, OpenGL, Vulkan, eBPF

Tools, Databases, and OS: Neovim, Git, GDB, IDA, QEMU, LaTeX, Docker, PostgreSQL, Linux, Windows