# Yanni Speron

Chicago, IL

yannisperon@gmail.com | +1 (847) 505-9019 | LinkedIn | GitHub | yannisperon.com

# Work Experience

### Research Software Engineer | Part-time | UIC WTSE

Nov 2024 - May 2025

- Full-stack software engineer utilizing C, Python, JavaScript, and HTML working on an intraoral capacitive touchpad.
- Implemented a PyTorch model to filter out saliva interference using collected capacitive sensor data from human trials.
- Debugged Bluetooth stack of embedded devices and decreased communication latency and jitter by 22% and 60% respectively.

#### **Software Development Engineer** | Full-time | **GetYourThing, Inc.**

Nov 2022 - Nov 2024

- Developed a recommendation and pricing engine in C++ that was 98% more efficient than existing software.
- Lead full-stack software development of internal tools using Java, Kotlin, and Swift in an Agile environment.
- Created data manipulation tools in Python using SQLite3 and a Node.js REST API.
- Managed deployment using Kubernetes, Docker, and CI/CD pipelines.

#### Junior Associate Software Engineer | Full-time | NetherRealm Studios

Aug 2021 - Jun 2022

- Contributed to the development of AAA video game Mortal Kombat 1 at a Warner Bros. Games subsidiary.
- Developed the backend system to manage suspending and resuming game fibers and threads.
- Used JIRA and Perforce to work in an Agile environment on a massive C++ codebase.

# **Software Engineering Intern** / *Internship* | **UIUC HCESC**

May 2021 - Jul 2021

- Lead C# developer on an interactive Unity-based animal spaying simulation for the UIUC College of Veterinary Medicine.
- Embedded and hosted the hardware accelerated simulation on a website so it could be used in course material.
- Worked with designers, artists, and reference experts in an Agile environment.

# **Skills**

**Programming Languages:** C++, C, Python, SQL, Java, C#, JavaScript, Swift, GLSL **Rendering Frameworks:** OpenGL, React, WebGL, UIKit, Unreal Engine, Unity

Computing Frameworks: Modern C++ STL, PyTorch, Pandas, NumPy, OpenCL, Spring Boot, Flask

Organizational Tools: Confluence, JIRA, Make, Git, Perforce VCS, Agile methods, GitHub Actions, CI/CD pipelines

**Mathematical Foundations:** Multivariable Calculus, Linear Algebra, Differential Equations, Discrete Mathematics, Statistics, Combinatorics, Optimization, Graph Theory, Calculus-based Physics

Soft Skills: Critical thinking, time management, problem-solving, effective communication, continuous growth, collaboration

# **Education**

#### University of Illinois at Chicago, College of Engineering

May 2025

- B.S. in Computer Science, cum laude, 3.70 GPA
- 99th percentile in graduating class ETS Major Field Test

# **Honors and Awards**

# Hack Ridge hackathon winner and recipient of 1517 Fund grant

Mar 2020

• Awarded the first-place prize of an annual 24-hour coding competition with 200 other participants.

#### **BrickHack 7 Best Newbie Hack**

Feb 2021

• Awarded first-place prize of the "Best Newbie Hack" category with 400 other participants.

#### Dean's List University of Illinois at Chicago and Michigan State University

Multiple

Michigan State University attended before transferring to UIC.

# **Personal Projects**

Fractyne: C++ Vulkan-based animated shader generation studio with signed distance field (SDF) rendering.

Andromeda: C++ cross-platform performant OpenGL 3D renderer with physically based rendering (PBR).

Atlas: C++ cross-platform game engine with Bullet3D physics and OpenGL Blinn-Phong shading.

**Dynama**: C++ physics engine with broad-phase, narrow-phase, and 2D/3D convex hull generation.

Smart Bike Helmet: Swift/UIKit/Arduino gyroscopic bike helmet with turn signals and BLE companion app.

**Battleship**: Java/JavaFX fully featured networked multiplayer Battleship game in 3D.

Website: React portfolio site showcasing some projects.