

YANNI SPERON

Chicago, IL | yannisperon@gmail.com | (847) 505-9019 | [GitHub](#) | [LinkedIn](#) | [Website](#)

SUMMARY

Versatile and motivated Computer Science professional with experience developing reliable, scalable solutions across various platforms to solve complex technical challenges. Adaptable and curious, with a problem-solving mindset and a focus on learning new technologies and refining skills. Eager to contribute to a collaborative team where innovation and continuous growth are encouraged, while delivering meaningful and effective results.

SKILLS

Programming Languages: C++, C, SQL, Python, Java, C#, Scala, F#, JavaScript, Swift, GLSL

Rendering Frameworks: OpenGL, DirectX, Vulkan, UIKit, SpriteKit, SceneKit, React, WebGL

Computing Frameworks: C++ STL, TensorFlow, PyTorch, NumPy, OpenCL, CUDA, Bullet

Digital Creation Tools: Unity, Unreal Engine 4/5, Blender, Autodesk Maya, Adobe Photoshop

Organizational Tools: Confluence, JIRA, Git, Plastic SCM, Perforce VCS, Microsoft Suite

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

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

EDUCATION

University of Illinois at Chicago, College of Engineering – B.S. in Computer Science **2023 – 2025**

- Cumulative GPA: 3.70/4.0
- Expected Graduation May 2025

Michigan State University, College of Engineering – Computer Science **2020 – 2022**

- Cumulative GPA: 3.83/4.0
 - Transferred to UIC May 2022
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HONORS & 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.
- Solely developed a sleep mask that woke the user up gradually using LED lights built into the fabric. Alarms were set in the companion SwiftUI app through Bluetooth communication with an Arduino Nano.

BrickHack 7 Best Newbie Hack **Feb 2021**

- Awarded first-place prize of the “Best Newbie Hack” category with 400 other participants.
- Sole developer of the backend of a website that performed sentiment analysis.
- Calculated and provided statistics on any X user’s account for display on the front end.
- Back-end API written in Python using the Flask framework and hosted on an AWS server.
- Routed traffic through a proxy server to avoid X denying all requests from AWS servers.

Dean’s List University of Illinois at Chicago and Michigan State University **Multiple**

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WORK EXPERIENCE

Research Software Engineer at UIC WTSE

Nov 2024 – Present

- Collaborated across interdisciplinary teams, including healthcare, engineering, and design in the University of Illinois at Chicago Wearable Technology and Sensory Enhancement Laboratory.
- Worked as a full-stack software engineer, utilizing C, Python, JavaScript, and HTML to build functional prototypes and research tools designed around accessibility and connectivity.
- Designed and developed a wearable solution to diagnose and rehabilitate the impeded communication of stroke patients using an oral embedded device with Bluetooth Low Energy (BLE) connectivity.

Freelance Software Developer at GetYourThing, Inc.

Nov 2022 – Nov 2024

- Developed basic recommendation and pricing engine in C++.
- Collaborated with clients, artists, and developers while leading full-stack iOS development of two internal tools using Swift, UIKit, SpriteKit, and SceneKit.
- Developed a private RESTful API in Node.js connected to an SQL database.
- Created internal data manipulation tools in Python using SQLite3.

Junior Associate Software Engineer at NetherRealm Studios

Aug 2021 – Jun 2022

- Worked on *Mortal Kombat 1* at a Warner Bros. Games subsidiary.
- Designed new features, debugged systems, and worked alongside industry professionals on a massive C++ codebase in Unreal Engine 4 using JIRA and Perforce to stay organized.

Software Engineering Intern at UIUC HCESC

May 2021 – Jul 2021

- Lead C# developer on a Unity-based spaying simulation for veterinary students, working with designers, artists, and experts at the University of Illinois at Urbana-Champaign College of Veterinary Medicine.

IT Manager for Park Ridge Medical Spa

Dec 2019 – Jul 2023

- Installed and configured software. Routed and terminated ethernet cables. Set up a security system.
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RELEVANT EXPERIENCE

- Working on a C++ Vulkan-based animated shader generation studio with mesh rendering through SDFs.
 - Implemented convex-hull generation algorithms, Monotone Chain, Jarvis March, Chan's algorithm in C++.
 - Built three versions of a performant cross-platform OpenGL rendering engine in C++ featuring physically based rendering, reflections, shadows, Bullet physics integration, and an extensive user interface API.
 - Designed and built a smart bike helmet with head-motion-controlled turn signals using LEDs, sensors, and an Arduino over BLE. Developed an iOS app with crash detection via FSRs, recommending medical intervention based on severity. Added an optional glove component for hand-gesture turn signal control.
 - Created a fully featured networked multiplayer Battleship game in 3D using Java and the JavaFX platform. Implemented an entity-component system and 3D model, texture, and material loaders. It contained a server written from scratch using raw Java socket programming.
 - Developed a pixel sorting program and a 3D noise visualizer in C++.
 - Many more projects are available to be viewed on my [personal website](#).
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REFERENCES

Available upon request