YANNI SPERON

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

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++, C#, F#, JavaScript, Swift, Python, Java, Scala, SQL, GLSL
- **Rendering Frameworks:** UIKit, SpriteKit, SceneKit, Three.js, WebGL, OpenGL, DirectX, Vulkan
- **Computing Frameworks**: TensorFlow, PyTorch, NumPy, Flask, OpenCL, OpenCV, CUDA, Bullet
- **Game Development:** Unity, Unreal Engine 4/5, Blender, Autodesk Maya, Adobe Photoshop
- **Development Tools:** Confluence, JIRA, Git, Plastic SCM, Perforce VCS
- **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
- **Maine South High School – High School Diploma** **2016 – 2020**

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.
  - Solely develop a sleep mask that woke the user up gradually using LED lights built into the fabric. Alarms were set in the companion app through Bluetooth communication working against 200 others.
  - Wired with and programmed on an Arduino Nano. User interface written on iOS in Swift using Core Bluetooth and SwiftUI.
- **BrickHack 7 Best Newbie Hack** **Feb 2021**
  - Worked with two other students to create a website that performed sentiment analysis.
  - Provided statistics on any X (formerly known as Twitter) user's account.
  - Back-end API written in Python using the Flask framework and hosted on an AWS server.
  - Front-end written in HTML, JavaScript, and CSS leveraging AJAX techniques.
  - 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**
  - Part-time commitment (10 to 20 hours weekly) alongside school.
  - 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**
  - Part-time commitment (20 to 30 hours weekly) alongside school.
  - 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**
  - Full-time commitment (30 to 40 hours weekly) alongside school.
  - 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**
  - Full-time commitment (40 hours weekly).
  - Lead 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**
  - Part-time commitment (10 hours weekly) alongside school.
  - Installed and configured software, routed and terminated ethernet cables, and set up security system.

RELEVANT EXPERIENCE

- 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 online matchmade Battleship game in 3D using Java and the JavaFX platform. Implemented an entity-component system and 3D model, texture, and material loaders. Contained a server written from scratch using raw Java socket programming.
- Built a performant cross-platform OpenGL rendering engine in C++ featuring physically based rendering, reflections, shadow mapping, Bullet physics integration, and an extensive user interface API.
- Collaboratively assessed user needs and hardware limitations to design solutions within time constraints.

REFERENCES

Available upon request