Lennart Strempfer

Undergraduate Student - Computer Science - Illinois State University

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Education

B.S. in Computer Science (Minor in Physics)

Illinois State University

Aug 2023 – Present | Normal, Illinois | GPA: 3.97

High School Diploma

Downers Grove North High School

Aug 2019 – May 2023 | Downers Grove, Illinois | GPA: 4.1

Experience

SULI Intern

SLAC National Laboratory

Jun 2025 - Aug 2025

- Designed user interfaces for controlling and monitoring vacuum setup in Python
- Designed and implemented Tracking and Path prediction algorithm for laser alignment for use in Inertial Confinement Fusion experiment

Independent Study

Illinois State University

Aug 2025 - Present

- Developed an AI pipeline to remove furniture from room images using deep learning techniques and large datasets
- Collaborated with a professor to design, fine-tune, and optimize AI models

Activities

Game Development Club

Illinois State University

Jan 2024 - Present | Normal, Illinois

- Implemented game play mechanics
- Collaborated with teammates to implement the vision of the game
- Helped making games in Unity using C#
- Previous Project: Crustation Quest

Language Proficiency

- Fluent in German
- Experience in French

Skills

Programming Languages

C/C++, Python, C#, Java

Environments

- Linux and Windows
- Git
- Visual Studio
- Vulkan

Libraries

- NumPy
- OpenCV
- Matplotlib
- PyTorch
- TensorFlow
- GLM

Projects

Convolution Calculator

Dec 2025

GitHub

- Developed a CUDA-accelerated image convolution application using NVIDIA's parallel computing toolkit, implementing optimized tiled convolution kernels for real-time image processing, including Gaussian blur and edge detection filters.
- Optimized GPU memory access and performance by leveraging shared memory and efficient kernel launch configurations.

Snake Game

Mar 2024 - Apr 2024

GitHub

- Led group in development of the game
- Set up Web socket to communicate between different
  physical devices
- Coded the game launcher in C++ and integrated it with the
  Java Game
- Helped program game server to run on an ESP32 device using C