

# Dragos Lup

 Dragos-Lup |  dragos-lup.github.io |  dragosglup@gmail.com |  (646)-377-5898

## EDUCATION

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**Georgia Institute of Technology** — BSc, Computer Science, GPA: 3.54/4.0 **May 2025**  
**Stuyvesant Highschool** — Highschool Diploma, GPA: 94.7/100 **May 2021**

## PROJECTS

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**Campus Cats App** | *TypeScript, React, SQL* | *Cat Tracking & Management App* **March 2025**

- Developed a modular and responsive web app for tracking and cataloging campus cats, integrating Firebase authentication and GT SSO for a seamless user and future developer experience.
- Designed an optimized SQL database for efficient data retrieval with 35% faster updates .
- Created an announcement system to notify users about found cats, reducing report processing time.

**Manga OCR** | *Python, PyTorch* | *Japanese Character Recognition* **December 2024**

- Tested ResNet, Tesseract and Vision Transformer models to identify Japanese Characters in manga.
- Developed an image preprocessing pipeline, extracting text bubbles, improving segmentation by 150%.
- Created and augmented a synthetic dataset with labeled images to enhance OCR performance.

**Dansu** | *Python, CUDA, MMPose* | *Machine Learning Dancing Game* **June 2024**

- Play a dancing game with only your web camera and body, using a pose estimation library.
- Trained a custom model on a NVIDIA GPU to massively increase frame rate from 4fps to 30fps.

**Roll The Die** | *C#, Unity* | *Classic Roguelike Game* **April 2024**

- Endless video game where the player controls a dice, destroying enemies with random effects.
- Created in under 48 hours, with an easily expandable framework to be applied to future updates.
- Focused on simple concepts to get satisfying and expandable mechanics, allowing for future updates.

## WORK EXPERIENCE

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**iTech Computers** | *Intern, Remote* | *Medias, Romania* **July 2024**

- Optimized the company website, creating improvements that enhanced load times by 200%.
- Developed a microservice that automated analytical reporting, increasing labor efficiency by 15%.
- Created an intuitive data input system that streamlined the workflow for teams, improving efficiency.

## ACTIVITIES AND AWARDS

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**Runner Up for GT Global Game Jam** **February 2023**

- Collaborated in a team to make a tower defense game framework from scratch in under 48 hours.
- Designed an evolving map and towers that changed as you played, creating diverging paths.
- Focused on clean and modular fundamentals, in order to easily create new towers and enemies.

## SKILLS

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**Coursework:** Procedural Content Generation, Computer Architecture, Algorithms, Computer Vision, Artificial Intelligence, Machine Learning, Deep Learning, Robotics and Perception  
**Technologies:** C#, C++, JavaScript, Python, Rust, HTML, SQL, Lua, GLSL, C, Java, Swift, Go  
**Tools:** React, PyTorch, NumPy, Git, Firebase, Node.js, MongoDB, Unity, Docker, OpenGL  
**Languages:** Romanian (Native), English (Native)