

# Vedant Gupta

U.S Citizen | [vedantgupta001@gmail.com](mailto:vedantgupta001@gmail.com) | +1 (650)382-8778 | [LinkedIn](#) | [GitHub](#)

## EDUCATION

---

**Columbia University – New York City, NY** **Fall '26 – Fall '27**  
M.S. in Computer Science – Incoming Fall 2026

**Case Western Reserve University – Cleveland, OH** **Fall '22 – Spring '26**

B.S. in Computer Science (Primary Major), Finance (Secondary Major), Mathematics (Minor)

Honors: Dean's List 5/6 Semesters, Junior-Senior Scholarship (2025-2026)

**Relevant Coursework:** Data Structures, Algorithms, Artificial Intelligence, Machine Learning, Software Engineering, Computer Security, Statistics, Operating Systems and Concurrent Programming, Full-Stack Web Development, Number Theory, Data Science Systems, Database Systems, Investments, Corporate Finance, Real Estate, Empirical Analysis in Finance,

## EXPERIENCE

---

**Lenskart.com – AI/ML Intern (Information Systems/Vision) - Bangalore, India** **June 25 – August 25**

- Built and deployed a glasses segmentation + anti-spoofing pipeline using modern CV frameworks.
- Optimized preprocessing for ~600ms in-store latency and scaled to 100+ retail outlets.
- Benchmarked OCR pipelines for extracting prescription data from optometry documents and conducted feasibility study.

**Trident Growth Partners (India) — Full Stack Web Development Intern – Bangalore, India** **May 25 - May 25**

- Shipped the firm's website using Next.js/TypeScript/Tailwind; handled updates and performance.
- Resolved all VAPT-flagged security issues (security headers, CORS, exposed metadata) to meet audit compliance.

**Amagi Media Labs — AI Intern - Bangalore, India** **June 24 – August 24**

- Built a Python/OpenCV pipeline to extract keyframes + subtitle metadata for scene summarization.
- Enabled early multimodal summaries by packaging frames and prompting GPT for structured outputs.

## RESEARCH & TEACHING EXPERIENCE

---

**VULabs (Prof. Yu Yin), Case Western Reserve University - Research Assistant** **Fall '25 – Present**

- Built repeatable manipulation task scripts for 6-DoF arm using RealSense RGB-D perception and safe motion primitives.
- Implemented synchronized run recording of robot state (J1-J6, TCP pose) and RGB/depth streams for evaluation.
- Building calibration regeneration and verification tools to improve camera-to-robot alignment reliability.

**Case Western Reserve University - Teaching Assistant, Data Structures** **Fall '24 & Fall '25**

- Designed coding and theoretical assignments on BST, Sorting Algorithms and Graphs for a class of ~155 students.
- Graded midterms, final exams, and assignments, and held weekly office hours to clarify conceptual doubts.

**Case Western Reserve University - Supplemental Instruction Leader – Calculus** **Fall '24**

- Led weekly recitation sessions for a class of ~30 students, teaching lecture material and administering quizzes.
- Proctored and graded Midterm and Final exams for ~340 students.

## TOP PROJECTS

---

**SeeCare | Senior Project Capstone**

- Proposed the concept and led the system architecture for an AI-assisted smart glasses tool for dementia patients.
- Built the full React Native UI and interaction flow and implemented expo-based media processing and audio tooling.
- Won First Place – CWRU Intersections (CS & DS Category)

**BitLens | Hackathon Project**

- Built a tool that automatically analyzes any public GitHub repository and generates clear set up and run instructions.
- Selected as a Top 10 project at the BDAA x Lovable Hackathon. (Ohio State University)

**BrainWave | Academic Group Project**

- Developed a virtual study group platform to facilitate real-time collaboration, study management, and resource sharing.
- Implemented real-time chat, video conferencing, scheduling and notification services.
- Won Second Place in Software Engineering Class at Case Western.

## TECHNICAL SKILLS

---

**Programming Languages:** Python | Java | JavaScript | C | C++ | GO | SystemVerilog | SQL | CSS | Assembly | CUDA |

**Frameworks & Libraries:** OpenCV | PyTorch | TensorFlow | Scikit-Learn | FastAPI | Flask | React | FFMPEG | NumPy |

Pandas | Matplotlib | Seaborn | OCR Libraries | YOLO models | MediaPipe | DeepFace | SAM2 | ManiSkill | NEBULA

**Tools & Platforms:** Docker | Git & GitHub | Jupyter | Maven | StackBlitz | Vercel | Supabase | Figma | HPC |