Colin Vu

colinhvu@gmail.com | (650) 447 - 4083 | LinkedIn: linkedin.com/in/colin-vu | GitHub: ColinVu | Website: colinvu.org

EDUCATION

Georgia Institute of Technology **Atlanta, GA**

Bachelor of Science in Computer Science *August 2022 – May 2026*

- **GPA:** 4.0/4.0, *Dean's List, Faculty Honors*
- **Concentrations:** Media/Graphics & Modeling/Simulation
- **Minor:** Industrial Design
- **Coursework:** Algorithms, Data Structures, Object-Oriented Programming, Computer Networks, Computer Architecture, Statistics, Human Centered Design, Computer Graphics, Machine Learning, Fundamentals of GIS, Information Visualization

SKILLS AND AWARDS

Languages: Java, Python, JavaScript, TypeScript, C++, C#, C, HTML, CSS, MySQL, Postgres, Android XML, Assembly, Swift
Frameworks/Libraries: React, Node, LangChain, PyTorch, Pandas, NumPy, OpenCV, Pixi, Scikit-Learn, Junit, TailwindCSS, Whisper
Tools: Git, AWS EC2 & Route 53, Docker, Cursor, Jupyter, Jira/Confluence, Figma, SVN, ArcGIS, Unity, Blender, Android Studio, XCode
Awards: Bronze Palm Eagle Scout

EXPERIENCE

Seraphine Glass **San Francisco, CA**

Founding Engineer *April 2025 - Present*

- Founding engineer of a startup building augmented reality glasses with a built-in AI remembrance agent/lifestyle manager.
- Secured $155,000 in conditional pre-seed funding ($30k unconditional) from Fusen and the Georgia Tech Startup Exchange.
- Attended business meetings with 10+ VCs to discuss funding and 5+ manufacturers to negotiate hardware needs and develop a supply chain. Built TikTok and Instagram pages for marketing content, averaging 1,000+ organic views per video.
- Built engineering demo w/ GPT4.1 for prompt refinement and analysis and various APIs for seamless compatibility w/ device input & data (Whisper, Google Places, NWS, LangChain). Backend hosted via AWS S3 & Route 53.

Friendly Cities Research Lab **Atlanta, GA**

Undergraduate Research Assistant *January 2025 - Present*

- Manipulated federal databases in Python and ArcGIS to prepare geographic datasets for use by journalists and researchers.
- Datasets were distributed via Harvard Dataverse and were requested by / sent directly to *The New York Times*.

American Gaming Systems **Duluth, GA**

Full-Stack Software Engineering Intern *May 2024 – August 2024*

- Developed a client-facing UI interface for casino managers to modify slot machine game assets, programmed in Pixi, Node.js, and React.js using Agile principles. Managed tasks and created documentation in Jira/Confluence.
- Led design and integration of the program to connect the front-end interface with internal APIs, diagramming the class framework with Figma and Miro. Developed back-end infrastructure in JavaScript and TypeScript.
- Wrote unit tests with C++ RESTful APIs to ensure the successful interplay of real-time events with the front-end UI.
- Delivered project demos to business team and CTO as proof of concept to modernize future trajectory of engineering team.

Georgia Tech Research Institute – Vertically Integrated Projects **Atlanta, GA**

Undergraduate Research Assistant *August 2023 – December 2024*

- Developed Geographically Weighted Regression (GWR) algorithms to assess the impact of infrastructure projects on GHG emissions, employing MySQL to clean and standardize the large traffic datasets analyzed.
- Utilized Prithvi, a NASA/IBM geospatial intelligence tool, to analyze satellite data and predict future cropland conditions in Ukrainian towns. Received a Request of Information (ROI) from the Federal Register to document the work for public policy.

PROJECTS

Big Daddy – UC Berkeley AI Hackathon 2025 | *OpenCV, LangChain* *June 2025*

- Built a browser parental controls agent that evaluates childrens' internet behavior by analyzing live screen content (GPT-4o) and gauging emotional status via computer vision (DeepFace). Uses a multi-step agentic process to force page redirections and voice feedback. Also provides parents with a detailed LLM summary of the child's activity and emotional trends.

NBA Outcome Model | *Jupyter Notebook, PyTorch, Scikit-learn* *March 2025 – April 2025*

- Developed an end-to-end ensemble pipeline combining LSTM, Neural Networks, Random Forest classifiers, and Collaborative Filtering techniques to forecast NBA game results from box score metrics and team ranking histories.
- Surpassed market benchmarks, achieving a 52% win rate against official NBA betting lines.

ML False News Detection Model | *Jupyter Notebook, NumPy, Pandas* *June 2023*

- Logistic Regression + Natural Language Processing (NLP) model to predict the likelihood of an article being fake news. Used Bag of Words (BoW) for feature extraction, GloVe word embeddings to analyze sentiment. Final confidence interval 97%.