Kyle Chu

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EDUCATION

Cornell University | GPA: 3.68   **Ithaca, NY**
Bachelor of Science in Computer Science, Minor in Artificial Intelligence   *Aug. 2023 – May 2027*

RELEVANT COURSEWORK

- Data Structures
- Algorithms Analysis
- Machine Learning
- Artificial Intelligence
- Systems Programming
- Computer Vision
- Computer Networks
- Robotics
- Operating Systems
- Deep Learning
- Functional Programming
- Text Mining

EXPERIENCE

Software Engineering Intern (Incoming)   **May 2026 – August 2026**
AMD   *San Jose, CA*
- Engineering **high-performance debug tools** for **AI compilation** within the **Adaptive and Embedded Computing Group (AECG)** to optimize the deployment of complex models on **hardware accelerators**
- Enhancing **AI model results** and **system performance** through **C++**, **Python**, and **PyTorch** while performing low-level tasks including **kernel-level debugging** and **driver development**

Undergraduate Teaching Assistant | *CS 4670: Computer Vision*   **January 2026 – Present**
Cornell Ann S. Bowers College of Computing and Information Science   *Ithaca, NY*
- Facilitating technical mastery for **170+** students by leading office hours and grading projects on core CV concepts, including feature detection, epipolar geometry, and structure-from-motion
- Partnering with a **18**-person course staff to streamline grading workflows and provide architectural feedback on student assignments involving convolutional architectures, semantic segmentation, and Vision-Language models using **PyTorch** and **NumPy**

Software Engineering Intern   **June 2025 – August 2025**
Nonlinear   *San Francisco, CA (remote)*
- Automated AEC workflow execution processes by across **15+** companies by building a node-based AI workflow builder with **FastAPI, React, LangChain, PostgreSQL**
- Cut manual PDF parsing time **70%** by shipping OCR + structured extraction pipelines using **AWS Textract, PyMuPDF, Pydantic**
- Created full stack tools to reduce compliance errors by **63%** over more than **1000** documents through automated PDF comparison and annotation using **React, Next.js** and **Python**

Front-end Developer   **March 2024 – August 2025**
Cornell Pi Delta Psi Fraternity, Inc.   *Ithaca, NY*
- Launched a **Next.js** and **TypeScript** platform to streamline alumni engagement, increasing users by **200%** and raising over **$4,000**
- Optimized site performance and SEO to improve traffic by **85%** and established a **CI/CD** pipeline on **Vercel** for reliable production updates

PROJECTS

FantasyForecast | *Python (Pandas, Scikit-learn), TypeScript, SQL*   **September 2025 – Present**
- Architected a full-stack ML system using **FastAPI** and **PostgreSQL**, deploying per-position **XGBoost** models for real-time inference
- Engineered an automated **ETL pipeline** with **NumPy** and **Pandas** to process **12+** years of NFL data, achieving **45%** prediction accuracy, outperforming baseline public prediction methods by 5-9 percentage points

Syllaparse | *TypeScript (Next.js, React), Python (FastAPI, PyMuPDF, SQLAlchemy)*   **June 2025 – Present**
- Built and deployed a full-stack platform for **100+** students using **OpenAI API** and **PyMuPDF** to automate lecture and exam schedule extraction from PDFs
- Integrated **Google Authentication** and **Google Calendar API**, reducing manual student data entry times by **92%** through streamlined authentication and API management
- Designed and implemented a **PostgreSQL** database and **Google Cloud Storage**, enabling efficient data management and faster query performance

TECHNICAL SKILLS

Languages: Python, JavaScript/TypeScript, Java, C, SQL, OCaml, HTML/CSS
Frameworks & Tools: React.js, Next.js, Node.js/Express.js, Astro, Flask, FastAPI, Tailwind CSS, Docker, AWS S3, GCP, Vercel, PostgreSQL, MongoDB, Redis
Libraries: PyTorch, Scikit-learn, LangChain, NumPy, Pydantic, React Redux, Pandas, DuckDB