Chi Che Colin Wu

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EDUCATION

Purdue University — May 2026
Bachelor of Science in Computer Science — *West Lafayette, IN*
- **Courses**: Operating Systems, Data Mining & Machine Learning, Algorithms Analysis, Systems Programming, Data Structures and Algorithms, Computer Architecture, Discrete Math, iOS Development In Swift
- **GPA**: 3.39/4.0

EXPERIENCE

Undergraduate Data Science Researcher — Aug 2024 – Present
The Data Mine, Purdue University — *West Lafayette, IN*
- Collaborated with **PepsiCo** on mapping environmental risks impacting their manufacturing sites, developing a dashboard to provide and display predictions for extreme weather events (e.g., floods, droughts) and climate change impacts.
- Collected **GIS** data using open-source APIs, processed it with **Django** to generate insights, and visualized the results in **Power BI** to help optimize factory operations and mitigate environmental risks.

Machine Learning Intern — May 2024 – Aug 2024
REVLIS Biotech Company Limited — *Taipei City, Taiwan*
- Processed, cleaned, and visualized hundreds of ECG signals from hospital patient data using **NeuroKit2**, **Pandas**, and **Matplotlib** to extract features and generate insights for detecting Atrial Fibrillation.
- Trained and tested RandomForest, CNN, and LSTM models using **scikit-learn** and **TensorFlow** on the processed data, achieving approximately a **97.5%** accuracy in Atrial Fibrillation detection.
- Developed an LLM chatbot using Hugging Face's **LLaMA2** model, fine-tuned with medical research papers and company data using **LangChain** and **Transformers** to retrieve and answer company-specific inquiries accurately.

PROJECTS

StonkSensei | *AI-Powered Stock Market Analysis Platform* — Feb 2025 - Present
- Developed a financial analytics website leveraging pre-trained **BERT** models for sentiment analysis on Reddit and financial news, integrating real market data to assess stock hype and risk.
- Built the platform with **FastAPI (Python)** and **React/Next.js (TypeScript)** with **MongoDB** for data storage, real-time data scraping using **Selenium** and **BeautifulSoup**, and integrated authentication with **Auth0**.

Bucketlist | *Goal Achievement Community App* — Oct 2024 - Present
- Developed a commissioned mobile app where each *bucket* serves as a community, allowing users to connect, share tips, and collaborate on achieving specific goals, with an emphasis on travel-related objectives.
- Led the technical development using **React Native**, **Express.js**, **Node.js**, **PostgreSQL** hosted on **AWS RDS**, and **AWS S3** for media file storage, ensuring scalability and seamless integration for future goal categories.

Purdue Paths | *Interactive Campus Dorm App* — Aug 2024 - Present
- Coordinated the development of ACM SIGAPP's annual 2024-2025 project, an interactive map for university students to explore campus dorms, view detailed information, and access user-generated reviews, including ratings, images, and comments.
- Led the frontend development with **React Native**, integrated the backend powered by **ASP.NET** and **MongoDB**, ensuring a seamless and dynamic user experience.

LEADERSHIP

President — Apr 2024 - Present
ACM SIGAPP Purdue — *West Lafayette, IN*
- Led ACM SIGAPP, under the ACM chapter at Purdue, organizing callouts, workshops, and advertising to increase membership and visibility while leading the development team for the club's annual large-scale app development project.

TECHNICAL SKILLS

Languages: C, C++, C#, Python, Java, JavaScript, TypeScript, PHP, Swift
Technologies: React.js, React Native, Vue.js, Django, ASP.NET, Express.js, Node.js, TensorFlow, LangChain, Pandas
Tools: Git, SQL, Docker, MongoDB, PostgreSQL, Figma, LaTeX, Bash, Linux, Nginx