

Chen-Kuan (Brian) Liao

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Education

Pennsylvania State University – University Park, College of Engineering

State College, PA

Bachelor of Science in Computer Science

- Cumulative GPA: 3.64/4.00
- Relevant Coursework: Data Structure, Algorithms, Computer Organization and Design, Systems Programming
- Expected graduation: May 2024

Experience

Bentley System – Software Engineering Intern

May 2022 – Aug 2022

- Added functionality to a .NET Core microservice to generate an audit trail of changes done to 3D elements in an iTwin
- Improved and added UI and functions for iTwin tools using React
- Improved request time 45 times faster by caching data for operational and unit tests for microservices
- Enhanced OpenTelemetry in .NET Core
- Wrote Kusto Query Language (KQL) to query data and visualized them in Power BI

2022 Google Solution Challenge – Global Top 50 finalist

Jan 2022 – June 2022

- Recognized as the only team in USA to get in the Global Top 50 finalist
- Created a discussion platform/application for social media and educational purposes
- Stored and sent data, using Firebase Realtime Database as our backend server
- Discussed our Android application, CatterBox, with Google engineers to improve both UI and functions

Learning Officer – Pennsylvania State University Association for Computing Machinery

Present

- Built websites for courses held by the organization during 2022 Fall semester
- Taught lectures based on Web Development to university students with activities and projects

Tech Fellow – Cybersecurity University – CodePath Fall 2021 / Spring 2022

June 2021 – May 2022

- Responsible for assisting students with the usage of technology tools- like Burp- and software to accomplish teaching and learning requirements.
- Communicated with students weekly while managing time effectively

Microsoft Tech Resilience Mentorship Program

Feb 2022 – Apr 2022

- paired with trained Microsoft software engineers to practice necessary non-tech skills, like Growth mindset, Self-regulation, Self-efficacy, Active listening and so on, needed to prepare for future CS related jobs

Projects

Field-Programming Gate Array (FPGA) MIPS Five Stage Pipelined CPU

- Utilized Xilinx Vivado software to implement a mini-CPU written in Verilog on a xc7z010clg400-1 device
- Mitigated data hazards and increased performance by implementing instruction forwarding

How I learned to code website

- Started self-learning HTML, CSS from watching YouTube and reading articles during the summer of 2021

AI face recognition tool

- Used trained data from OpenCV to do both live and image face detection

Terminal-Like profile website

- Provides an interactive terminal-like website which outputs information about myself based on the user's command line input

Skills

- Java, Python, C#, C, HTML, CSS, JavaScript, TypeScript, Verilog, KQL, SQL
- React, .NET Core, Node, Npm, OpenCV, Kali Linux, Honeycomb, OpenTelemetry, SQLmap, Hashcat
- Docker, VirtualBox, Android Studio, Firebase Realtime Database, Parse Server, GitHub, Burp, Vivado, Power BI
- Fluent in Chinese, English