

# Jimmy, Wei-Cheng Chen

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## Technical Skills

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<b>Programming</b>	Python, JavaScript/TypeScript, C#, Java, C++, HTML, CSS, Bash, JSON
<b>Platform &amp; Framework</b>	Node.js, Express.js, React, Ajax, gRPC, Mesos/Aurora, BigQuery, PostgreSQL, MongoDB, Postman, Git/Perforce, protobuf, PySpark, Docker, Jira, Phabricator, Figma, Unity, XR, Heroku
<b>Courses</b>	Operating Systems, Algorithms, Data Structures, Linear Algebra

## Work Experiences

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**Oscar Health** || *Software Engineer Intern, Full Stack* || New York City, NY May 2022 – Aug. 2022

- Implemented and deployed gRPC microservices to support a utilization management platform and non-medical claim processing in Aurora. Interacted with BigQuery and PostgreSQL via Protocol Buffer under a Python framework
- Developed a full-stack automation tool independently, which resulted in a 30% increase in team efficiency for testing
- Analyzed edge cases for gRPC microservices and created unit tests with mocking to ensure optimal functionality

**3drens** || *Software Engineer Intern, Front End* || Taipei, Taiwan Oct. 2020 – May 2021

- Developed and maintained a Content Management System (CMS) platform handling 6K+ monthly orders with React. Identified and rectified code redundancy and inefficiencies in the authentication structure, reducing over 50% of code
- Created an authentication and payment experience for a logistic platform's **landing page** serving over 2K daily users. Reconstructed content marketing (notification, promotion) tools, which resulted in a 25% increase in successful orders
- Built a responsive **e-commerce site** from scratch, utilizing React, SCSS, Bootstrap, and Material UI, which boosted platform usage rates by 60%
- Completed the internship with 400+ PR and ranked first among eight interns at the same time

**Intel Corporation, Graphics Visual Computing** || *Software Engineer Intern* || Folsom, CA Jan. 2023 - Present

- Developed an efficient automation tool using Python that reduces 3D workload processes by 75% of the time and decoupled general functions into a shared utility library
- Developed a data pipeline to collect and conduct data visualization using Python and Jupyter Notebook and provide insights to the manager
- Collected and analyzed driver performance data using 3D workload tools such as CapFrameX and PresentMon

**The Alice Project, Carnegie Mellon University** [\[link\]](#) || *Software Engineer* || Pittsburgh, PA Jan. 2022 – Dec. 2022

- Optimized the performance of the Alice 3 IDE and Alice Player using Java, C#, and Unity, resulting in a better user experience while publishing projects
- Developed an OpenGL-based rendering system that supports custom textures on various 3D shapes, and rebuilt the camera system to automatically reorient the player's view from different angles
- Made significant contributions to the release of Alice 3.7 and Alice Player beta 19

## Education

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**Carnegie Mellon University, School of Computer Science** Pittsburgh, PA, USA

*Master of Entertainment Technology* || GPA: 3.7 / 4.0 Aug. 2021 – May 2023 (expected)

- Relevant Courses: Principles of Software Construction, Introduction to Computer Systems, Building Virtual Worlds

**National Taiwan University (NTU)** Taipei, Taiwan

*B.A. in Economics* || GPA: 3.2 / 4.0 Sept. 2011 – June 2015

## Independent Projects

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**Santorini (Java, JUnit, TypeScript)** Oct. 2022 – Nov. 2022

- Built the extended version of popular board game with additional features to elevate the overall gameplay experience
- Developed a backend infrastructure utilizing Java and design patterns while using TypeScript to design and create the game's user interface

**MERN project - Survey Cookies (React, Node.js, Express.js, MongoDB)** [\[link\]](#) Sept. 2020

- Developed a web-based application, which has services like authentication, billing and email systems, for users to conduct surveys with their customers
- Built backend services using Node.js and Express.js and implemented CRUD operations following the RESTful API design pattern. Leveraged third-party APIs to connect with MongoDB Atlas for data storage
- Designed and constructed the website's front-end interface using React, Redux, and ReactDOM