Claire Tsui

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University of California, San Diego   *Sept 2021- Jun 2025*
Bachelor of Science in Mathematics (Applied)   Minor: Computer Science

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TECHNICAL SKILLS

Programming Languages: C#, Java, C++, Python, R, SQL, PHP, HTML/CSS/JS, Matlab, Bash

Frameworks & Tools: ASP.NET Core, React.js, Tailwind CSS, MSSQL, DBeaver, Postman, Docker, LaTeX

Languages: Fluent - English, Mandarin / Basic - Spanish, Korean

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WORK EXPERIENCE

GIGABYTE   **Taipei, Taiwan**
Software Engineer (Full-stack Developer)   *Jul 2025- present*
- Rebuild web platforms using ASP.NET Core with MVC service components, optimizing outdated code to improve maintainability
- Build and maintain 25+ APIs to retrieve and display real-time data, using Postman to test, debug, and document API endpoints reducing backend load
- Develop 10+ responsive web pages utilizing HTML, CSS, and JavaScript with admin functions such as modify, delete, and upload files
- Manage and query large relational databases using MSSQL and DBeaver, contributing to backend data operations and supporting analytics workflows.

PetMap   **San Diego, CA (Remote)**
Software Engineer Intern (Front-end Developer)   *Oct 2024- Mar 2025*
- Implemented an interactive Google Maps view using the Maps JavaScript API, handling map initialization, custom marker creation, and dynamic data rendering
- Developed and maintained scalable, responsive PetMap web using HTML, Tailwind CSS, JS, and React.js, leading to a 40% increase in user engagement and ensuring cross-device compatibility.
- Utilized GitHub for version control, delivering over 50+ pull requests, resolving merge conflicts, and coordinating with a team of 4+ developers to deliver consistent, high-quality code updates.

Academia Sinica (Institute of Statistical Science)   **Taipei, Taiwan**
Research Intern   *Jul 2024- Aug 2024*
- Developed and conceptualized a research project under the Cancer Moonshot initiative, focusing on innovative strategies to target and analyze cancer-related biomarkers
- Conducted comprehensive correlation and integrative analysis between patients' gene expression levels and phenotypic traits, and identified key genetic markers
- Designed and generated detailed visualizations using R, including heatmaps for gene expression patterns, MA plots to assess differential expression, and volcano plots to highlight statistically significant genes

OwlTing Group   **Taipei, Taiwan**
Software Engineer Intern (Full-stack Developer)   *Jul 2023- Aug 2023*
- Developed a dynamic blog website using PHP, incorporating features such as auto-complete search, user and post creation, tagging, commenting, and categorization to enhance user experience and functionality
- Built and styled the website with responsive and visually appealing interface using fundamental HTML and CSS
- Optimized the website by leveraging Laravel's functionality, which accelerated development time by 15% and enhanced backend efficiency

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ACTIVITIES

Triple C (Chinese Computer Community)   **UC San Diego**
Public Relation   *Feb 2023- Dec 2024*
- Securing sponsors and establishing collaborations for club activities with other organizations, increasing sponsorship revenue by 25%
- Managing and operating official Weixin account, posting updates and feeds according to the club's schedule, which boosted follower engagement by about 40%