Chen Wei Chang

steven891213.ii12@nycu.edu.tw   github.com/chenwei891213

EDUCATION

M.S. National Yang Ming Chiao Tung University   **Hsinchu, Taiwan**
Institute of Artificial Intelligence Innovation (GPA 4/4.3)   *Sep. 2023 -*
B.S. National Taipei University of Technology   **Taipei, Taiwan**
Department of Electronics Engineering (GPA 3.91/4.0)   *Sep. 2019 - June. 2023*

TECHNICAL SKILLS

Programming Languages: Python, C++, JavaScript(React.js), SQL(MySQL, SQL server), Verilog
Libraries and Tools: PyTorch, OpenCV, Git, Docker, Linux

WORK EXPERIENCE

Full-Stack Engineer   **Sep. 2023 - Present**
NYCU Mobile and Pervasive Computing Laboratory, Hsinchu, Taiwan   *Flask, React.js, MySQL, Linux*

- Developed multiple new analysis features on the CoachAI website, including scoring position replay, smash-to-net running speed statistics, and various other analytical functionalities.
- Developed a backend management system providing account/group management, dataset authorization management, and webpage access control.
- Developed a doubles website based on the architecture of the singles badminton website, enhancing the website's functionality and diversity.
- Maintained the website on Linux servers.

Full-Stack Engineer   **Feb. 2023 - Jun. 2023**
Mores Tech, Taipei, Taiwan   *React.js, SQL Server, ASP.NET MVC*

- Developed a feature to generate various OpenOffice format reports for reference and download through LibreOffice integration.
- Developed a message and Q&A feature allowing users to report project updates to different departments through the system and track the progress of the projects.

PROJECTS

- **Golf Ball Trajectory Estimation System**, Developed a computer vision system using high-speed cameras to track golf balls, calculate flight parameters, and visualize predicted flight trajectories on a web-based platform.   Link
- **RESTful Web Game Platform**, Designed and implemented an interactive web gaming platform with user authentication, classic arcade games, and competitive leaderboards using HTML, CSS, JavaScript, Express.js, and SQLite.   Link

PUBLICATIONS

- GCC: Generative Color Constancy via Diffusing a Color Checker   **CVPR 2025**
  Chen-Wei Chang, Cheng-De Fan, Chia-Che Chang, Yi-Chen Lo, Yu-Chee Tseng, Jiun-Long Huang, Yu-Lun Liu Link
  A novel approach that leverages pretrained diffusion-based inpainting models to generate color checkers within images, enabling accurate illumination estimation across different camera sensors.
- SpectroMotion: Dynamic 3D Reconstruction of Specular Scenes   **CVPR 2025**
  Cheng-De Fan, **Chen-Wei Chang**, Yi-Ruei Liu, Jie-Ying Lee, Jiun-Long Huang, Yu-Chee Tseng, Yu-Lun Liu   Link
  A novel approach for dynamic specular 3D scene synthesis combining 3D Gaussian Splatting with physically-based rendering and deformation fields.

EXTRACURRICULAR ACTIVITIES

- **Event Coordinator** in Student Association for the Department of Electrical Engineering - Sep 2020 - Sep 2021

SELECTED HONORS AND AWARDS

- Academic Achievement Award, Department of Electronics Engineering, NTUT   May. 2020
- Academic Achievement Award, Department of Electronics Engineering, NTUT   Nov. 2020