

# Chen Wei Chang

stevenfreecom1@gmail.com chenwei891213.github.io

## EDUCATION

**M.S. National Yang Ming Chiao Tung University**  
*Institute of Artificial Intelligence Innovation (GPA 4/4.3)*  
**B.S. National Taipei University of Technology**  
*Department of Electronics Engineering (GPA 3.91/4.0)*

Hsinchu, Taiwan  
Sep. 2023 -  
Taipei, Taiwan  
Sep. 2019 - June. 2023

## WORK EXPERIENCE

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

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

- 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.

## 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 for auto white balance 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.
- **IllusionMaker** Under review at SIGGRAPH Asia 2025  
Chun-Wei Tuan Mu, Zheng-Hui Huang, Chen-Wei Chang, Yung-Yu Chuang, Jia-Bin Huang, Yu-Lun Liu [Link](#)  
We propose a diffusion-based model for spatially varying defocus blur editing that enables precise depth-of-field control and demonstrates applications in perspective illusion videos and DSLR-like bokeh simulation.

## 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](#)

## 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

## TECHNICAL SKILLS

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