CHIEH HSIEH

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EDUCATION

Massachusetts Institute of Technology (MIT) **Cambridge, MA**

M.S. Candidate, Integrated Design and Management *2020 - Present*

- Focus on product design with high integration of human-centered design, engineering, and management.
- *WhaleTale:* Created a souvenir cheese board exclusively for MIT graduates and their families, final profit exceeded 35%. Responsible for 2D design, 3D modeling, and mass manufacturing by CNC
- *Ordo:* Designed a digital product, mobile app interface and process, to solve menu selection problems, restrictions on eating habits, and equitable payment when ordering between multiple people. Responsible for function planning and user testing
- *Vessel:* Conceived and developed modern planter; responsible for 2D design, 3D modeling, and function testing
- *SETIC:* Collaborated with Asian Science park Management Company and developed strategies regards to new channel development in order to optimize the capabilities and introduce Startups to enhance competitiveness of the science park

National Tsing Hua University (NTHU) **Hsinchu, Taiwan**

Master of Science in Power Mechanical Engineering, *2013 - 2016*

- Received 1st place in Computer-Aided Drawing (SolidWorks)
- Selected as a Teaching Assistant for Mechanical Design and Manufacturing & Opto-electromechanical system
- Published "Marine current power with Cross-stream Active Mooring" on Journal Renewable Energy109 (2017)

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

Bachelor of Science in Mechanical Engineering, *2008 - 2013*

- Creative Director for six different activities and associations(Student Association of the Department of Mechanical Engineering, NTU Mechanical Camp etc.)
- Received 2nd place in NTU Azalea Festival (NTU Department Expo.)

EXPERIENCE

Chroma ATE Inc. (leading company in power electronic test solution in Taiwan) **Taoyuan, Taiwan**

Mechanical Engineer *2016 - 2020*

- Managed VCSEL (Vertical-Cavity Surface-Emitting Laser) inspection machine organization, negotiated specifications and discussed technical issues with customers, and participated in optical experiments and designed products with a turnover of $250K(profit ratio > 60%)
- Saved 33% of raw materials by designing a new automatic welding device for solar panel components with laser heating
- Detected optical mechanism problems through root cause analysis and successfully reduced image shake by 2x
- Increased production yield from 87.7% to 94% by coordinating with subcontractor, developing new molds, ameliorating molds' structure to improve production efficiency and cutting stability
- Participated in cross-sectoral research and integrated relevant professionals across departments, moderating the conflict.

BUISINE: Bus X Cuisine (King's Design & Art School) *Spring and Summer 2019*

- Created new business model to benefit tourists, shrunk the sightseeing bus, and combined food delivery to reduce time waiting in line while traveling and eating, completed function design, 2D sketch, and 3D modeling

Z-Stylus: A Novel Device for 3D Human-Computer Interface (NTHU) *2014 - 2016*

- Developed new hand-held device for human-computer interaction that allows users to interact with computers directly, generating 3D images by 3D absolute positioning with multiple degrees of freedom (DOF) capability

SKILLS

- 2D/3D: Adobe Photoshop, Illustrator, InDesign, Flash, SolidWorks, Alias, UG NX, Photoview360, Key shot
- Engineering & Programming: AutoCAD, LabView, MATLAB, C++, C#, Visual Basic, Arduino, Auto LISP
- Manufacturing: CNC, machine tools, Laser cutter, 3D printer

INTERESTS & HOBBIES

- Interests: Podcasting, photography, travel, reading, fashion
- Hobbies: Badminton, playing piano, wakeboarding