Dominic Lim Co

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EDUCATION

Massachusetts Institute of Technology - MS. Computational Design

2022-2024 | USA

6.034 Artificial Intelligence, 6.C85 Interactive Data Visualization, 15.071 The Analytics Edge Data Analytics

University of Hong Kong - B.A in Architecture - First Class Honors

2015-2019 | Hong Kong

WORK EXPERIENCE

Computational Designer and 3D Printing Production Manager

12.2021 - 12.2022 | UAE & Hong Kong

Archireef (archireef.co): 3D Printing Artificial Coral Reefs, Hong Kong

- Collaborated with a multidisciplinary team of engineers and marine scientists in the design and deployment of 3300 sqft of modular artificial reef units across Hong Kong and Abu Dhabi, which resulted in a 99% coral survivorship rate, and was featured on CNN, the World Economic Forum and DesignBoom.
- Programmed generative algorithms for artificial coral reef form generation to allow for quick production of 3D models ready for 3D printing in clay and concrete.

Education UX Research Assistant, Dr. Jeanne Tan's Smart Textile Design Lab

12.2020 - 11.2021 | Hong Kong

Institute of Textiles and Clothing, Hong Kong Polytechnic University

Developed a human centered design and STEM workshop that engaged over 500 secondary school students across Hong Kong, which resulted in a subsequent government grant to continue the project. (dstem.net)

Research Assistant, Robotic Fabrication Lab

06.2019 - 02.2020 | Hong Kong

Faculty of Architecture, University of Hong Kong, Hong Kong

- Designed a 3D printed reef tile using CAD and parametric design for aiding coral growth in collaboration with marine scientists and other architects that was featured on SCMP, and turned into a startup.
- Assisted with teaching students the robotic 3D printing protocol in the lab.

UX Design Intern

07.2017 - 08/2017 | Hong Kong

Digitas APAC, Hong Kong

- Supported the UX team to redesign a hotel booking website; identified pain points, interviewed customers, created user profiles, and prototyped ideas which resulted in implementation.
- Led the UX and UI development of a responsive shopping mall campaign website for multiple platforms (mobile web and desktop) that won best intern project and pitch.

ACADEMIC PUBLICATIONS

- Co, D. & Chen, A. Procedural Knit: Exploring Underdetermined Fabrication via Knit, Procedural Generation and Posture Detection. IASDR 2021. Hong Kong
- Lange, C., Ratoi, L. & Co, D. Reformative Coral Habitats Rethinking Artificial Reef structures through a robotic 3D clay printing method. CAADRIA 2020. Bangkok, Thailand

AWARDS

- 1st Place MIT Energy Hack '22 for "Pacer: a planning tool for energy retrofits" Role: UX/UI Designer
- 1st Place Amazon Web Services: Hack The Orbital Reef Space Station '22 for "Waste Management System"
- 1st Place Bose Challenge @ MIT '18 for "Runner's High: Audio AR Pace Tracking App" Role: UX/UI Designer
- Best UX Award Microsoft ImagineCup '17 for "Granny: Al-Aided Youth Journaling App" Role: UX/UI Designer
- DesignBoom, "3D-printed terracotta tiles are being used to rejuvenate hong kong's coral reefs" (Team Christian Lange, Dominic Co, Jason Wu, David Baker, Vriko Yu, Phil Thompson)

SKILLS

Programming Languages: R (ggplot2, dplyr, R Markdown etc.), Python (Gurobi Optimization, pandas, numpy), Grasshopper (Kangaroo Generative Design Library)

Data Science/Tools: Jupyter, Git, PyCharm, RStudio

Software: Rendering Software (V-Ray), Rhino, Autocad, Adobe Suite (PS, AI, ID, etc.), Arduino Programming Fabrication: 3D Printing, CNC Milling/Waterjet/Laser cut, Robotic Arm Manipulation, Ceramic Injection Molding