Luca Chun Lun Lit

+1 (603) 359-9239   Luca.Lit.21@dartmouth.edu   linkedin.com/in/luca-lit/

EDUCATION

Dartmouth College, *Hanover, NH*   ***June 2021***
- **Applied Mathematics, Computer Science** *B.A.*   **GPA:** 3.94 / 4.00
- ***Relevant Coursework***: Algorithms, Software Design & Development, Full Stack Web Development, Machine Learning, AR/VR development, Computational Linguistics, Linear Algebra, Real Analysis, Probability Theory, Statistical Modelling and Analysis

EXPERIENCE

Digital Applied Learning and Innovation (DALI) Lab *(Social Impact Tech Organization)*
Product Manager   *Mar 2021 –*
- *Anivision:* Leading a team of 6 to develop a **VR application** that gamifies scientific education of animal behavior and perception. Spearheaded project roadmap and user testing to develop core gameplay mechanics and refactor codebase.

Code for Equity Fellowship at **Impact Labs** *(Social Impact Tech Organization)*
Product Manager, Software Developer   *Dec 2020 –*
- Collaborating with 5 fellows to conduct user research, UI/UX design and full-stack development of a **web app** servicing gamified educational curriculum for accessible web design, dedicated to increasing awareness for users with disabilities.

Harmonize (HR management *Software as a Service* company**)**   *Jul 2020 – Sep 2020*
Product Manager (Client Analytics Team)
- Employed SQL to curate product usage data; Used Python to develop a **logistic regression model** to forecast 3-month customer churn; performed **customer segmentation analyses** and devised **renewal marketing strategies.**
- Conducted 15+ **customer interviews** and scraped product reviews from web review platforms to reveal software defects.
- Worked with engineering team to implement **new chatbot features** to increase product adoption by 22% in 3 months.

JoyAether Limited *(Mobile Solutions Startup)*   *Jul 2018 – Aug 2018*
Product Manager, Software Developer
- Led 2-month rapid development of **mobile-banking app prototype** for *Citibank Hong Kong*. Communicated with client for project scoping, defined timelines and KPIs, coordinated team meetings to set milestones and plan project sprints.
- Developed an **Augmented Reality interactive shopping mobile app,** featuring reward games and 3D product modelling. Conducted Unity AR development, QA testing, and user research to support engineering, UX and marketing divisions.

MiaMira *(Marine Fashion Sustainability Social Venture)*   *Feb 2019 –*
Project Manager, Founder
- Founded a **United Nations-endorsed startup** producing sustainable clothing inspired by marine-life designs in support of conscious consumerism. Raised $20,000+ as director of production, social media marketing and web design.

RESEARCH

NLP Research Scientist at *Dartmouth Sustainable Health Labs*   **Python, NetworkX**   *Jun 2020 –*
Research: Understanding Public Perception and Communication around Telehealth during the COVID-19 Pandemic
- Developed a data pipeline to scrape telehealth-related tweets and trained a **linear support vector machine learning model** to classify tweets based on user type and tweet intent. Applied **sentiment analysis** and **hetero-functional graph theory** to characterize healthcare provider and patient communication patterns in the Twitter social network.
- Thesis published and presented at the *IEEE Smart Cities Conference 2020* and *INFORMS Annual Scientific Conference.*

Engineering Research Lead at *Dartmouth Robotics Lab*   **C, MATLAB**   *Jun 2019 – Jan 2020*
Research: 3D Printable Aerial Robots
- Developed a paired **simulator** and **interactive controller** for the aviation of soft-body drones with morphable geometry. Employed tetrahedral meshing, finite element method and linear quadratic regulator to optimize rotor thrusts.
- Engineered a **3D-printed functional quadcopter model** live demoed at the *Dartmouth 3D-Printing Symposium* in 2019.

Autonomous Robotics Research Scientist at *Dartmouth Robotics Lab*   **Python**   *Mar 2021 – Jun 2021*
Research: Autonomous Robotics Motion Planning
- Devising an obstacle avoidance system for autonomous surface vehicles. Implemented 3D LIDAR point cloud clustering for object detection and classification, and an Extended Kalman Filter to estimate object positions based on motion models.

Technical: Python, R, SQL, Java, C, MATLAB, C++, C#, HTML/CSS, React, JS   **Languages**: Cantonese, Mandarin, French
Additional Interests: Autonomous Robotics, NLP, AR/VR development, Web Design, Deep Learning, Artificial intelligence, Unity