Luca Chun Lun Lit

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EDUCATION

Dartmouth College, *Hanover, NH* ***June 2021***

- **Mathematics, Computer Science** *B.A.,* ***GPA*****:** 3.95 / 4.00
- ***Honors:*** *Summa Cum Laude, Phi Beta Kappa, Rufus Choate Scholar, Presidential Scholar, Neukom Scholar*
- ***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

WORK EXPERIENCE

Keystone Strategy *(Strategy & Tech Consulting Firm)* *Jun 2021 – Sep 2021*

Data Science Intern

- End-to-end development of digital platform backend to predict precise repair solutions to defected home appliances.
- Pre-processed 170,000+ rows of customer service data, and trained **deep learning NLP model** to outperform currently employed 3rd party software, increasing prediction accuracy from 89% to 98.6%.
- Built proprietary software codebase (~ 600 lines of Python code) for industry-leading repair intelligence company, increasing their enterprise value by double digits, at an estimated $200 million.

Digital Applied Learning and Innovation (DALI) Lab *(Social Impact Tech Organization)*

Product Manager *Mar 2021 – Jun 2021*

- Led a team of 6 at a startup-incubator to develop *Anivision*, a **Unity VR application** simulating animal perception.
- Spearheaded project roadmap, product specs 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 – Jun 2021*

- Collaborated with 5 fellows to conduct UI/UX design and full-stack development of a **web app** (React, Node.js) creating gamified educational curriculum for accessible web design, dedicated to increasing awareness for users with disabilities.

Harmonize ***(****HR management SaaS company****)*** *Jul 2020 – Sep 2020*

Data Science Intern

- 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 improve **automated chatbot features**, boosting product adoption by 22% in 3 months.

JoyAether Limited *(Mobile Solutions Startup)* *Jul 2018 – Aug 2018*

Product Manager, AR Engineer Intern

- *Citibank HK:* Led 2-month rapid development of a **mobile-banking app prototype** from scratch. Communicated with client for project scoping, defined timelines and KPIs, coordinated team meetings to set milestones and plan project sprints.
- *SnapPop:* Developed an **Augmented Reality mobile shopping app,** featuring reward games and 3D product modelling. Conducted Unity AR development, QA testing, and user research to support engineering, UX and marketing divisions.

RESEARCH + PROJECTS

NLP Research Scientist at *Dartmouth Sustainable Health Labs* **Python** *Jun 2020 – Jun 2021*

Research: *Understanding Public Perception and Communication around Telehealth during the COVID-19 Pandemic*

- Applied **sentiment analysis** and **hetero-functional graph theory** to characterize healthcare provider and patient communication patterns in the Twitter social network. Thesis published in *IEEE* and *INFORMS* scientific journals.

Engineering Research Scientist at *Dartmouth Robotics Lab* **C, MATLAB** *Jun 2019 – Jan 2020*

Research: *3D Printable Aerial Robots*

- Engineered a **3D-printed soft-body quadcopter model** live demoed at the *Dartmouth 3D-Printing Symposium* in 2019.
- Used computer-aided design software to construct and 3D-print soft-body drone frames capable of withstanding collisions.

Autonomous Vehicles 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, C++, C#, HTML/CSS, JS (Node, React, Express) **Languages**: Cantonese, Mandarin, French