

LI, KIN FUNG (CALVIN)

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EDUCATION

The Hong Kong University of Science and Technology (HKUST) Sep 2019 - May 2024
Dual Degree Program: BEng(COMP & ELEC) & BBA(GBM); Minors in Math and Robotics

- CGA: 3.94/4.3 (top 3%)
- Activities: Academic Secretary (DDPOC 2020-21), Student Ambassador (IPOSA 2020-21)

Eidgenössische Technische Hochschule (ETH) Zürich Feb 2022 - Aug 2022
Semester Exchange: Computer Science

- Grade: 5.63/6.0
- Member of *The Alternative*, a student society for technology, e.g. Linux, bash, console

RESEARCH INTERESTS

Matrix Phases, Phasal Analysis of MIMO Systems, Event-Triggered Estimation, Networked Control

RESEARCH EXPERIENCE

Matrix Phases Jun 2023 - Present
Research Assistant to: Prof. Li Qiu ECE@HKUST

- Studied the sectorial and segmental matrix phases, accretive-dissipative theory, numerical ranges and extensions
- Propose algorithms and criteria for the computation of segmental phases

Industrial Research: Link Adaptation in 5G URLLC Jun 2023 - Present
Jointly supervised by Prof. Ling Shi and Dr. Yuchi Wu ECE@HKUST

- Migrate multi-armed bandit (MAB) algorithms to link adaptation settings in 5G URLLC

Independent Study on Matrix Theory and Canonical Angles Dec 2022 - Feb 2023
Research Assistant to Prof. Li Qiu ECE@HKUST

- Authored the extensions to the textbook for "ELEC5600: Linear-System Theory" at HKUST
- Content: unitarily invariant norms, perturbation theory, canonical angles, Grassmann space and metrics

WORK EXPERIENCE

Flurry Finance Jun 2021 - Feb 2022
Software Engineering Intern

- Implemented optimization of DeFi lending portfolio, up to 2x return of naive algorithm
- Programmed smart contracts and scripts for yield farming, staking, tokens, trading, price oracle

HIGHLIGHTED TECHNICAL SKILLS

Programming Languages	Java, Haskell, C, C++, Solidity, Python, JS, TS, MATLAB, etc.
Computer Science	OOP, FP, ML, DB, Algorithms, Formal Methods, Blockchain, Networking
Electronic Engineering	Control Theory, Signal Processing, Embedded Systems, Circuits
Economics & Finance	Econometrics, Portfolio Theory, Derivatives, DeFi

PROJECTS AND LEADERSHIP

T&M Corporate Consulting: Google and Open Data Strategy for HKT Feb 2023 - May 2023
Team Leader, Student Consultant

- Provided consultation to HKT Digital Out-of-Home (DOOH) business unit
- Presented solution to HKT executives, Google Cloud HK engineering team, and TalentLabs cofounders
- Deliverables: geospatial analysis, dashboard app, consultation report and presentation
- Best performing team; Team MVP

Robocon Subteam, HKUST Robotics Team Dec 2019 - Jun 2021
Team Leader, Senior Hardware Engineer ← Junior Hardware Engineer

- Multiple champions and awards in Robocon (2021: archery, 2020: rugby)
- Managed 30+ mechanical, hardware and software engineers, performed circuit design and electronics R&D

T&M Prototyping: Financial Investment Prototyping for UBS Zürich Dec 2020 - Jan 2021
Team Leader, Student Analyst (AI Developer)

- Prototyped a ML-based fintech startup prediction tool with 70% accurate funding patterns
- Data pipelining, hypothesis testing, K-means, PCA, decision tree, regression