PERSONAL PARTICULARS

Name	LAU, CHUN KIT
Address	1203-6699 Dunblane Ave, Burnaby, BC, V5H 0J8
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Mobile	+1 (778) 723-6211
Github	https://github.com/chunkitmax
Website	https://chunkitmax.github.io/about?s=cv

EXPERIENCE

Analog Devices Inc.   **Metro Vancouver, Canada**

Firmware Engineer
Nov 2022 – Apr 2024
(1 year 6 months)

- Designed and built a library that enables internal and customer tools to effectively control leading USB extender products and streamlines development processes. It significantly reduces firmware upload time by 50%
- Maintained and enhanced a manufacturing tool written in Scala by updating its encryption module to safeguard product integrity through robust encryption at the factory programming stage
- Contributed to the implementation of a communication protocol for USB extenders to facilitate reliable data transmission up to 120 meters
- Tested and debugged a communication module on Embedded Linux
- Researched and built a proof-of-concept module for device discovery on the network layer for USB extender products

Skills: C, Python, Scala, PostgreSQL, UART, I2C, Atmel, DP Link Training, Link Layer, Network Layer, Multicast, Linux

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SoarStack Tech Solutions Ltd.   **Hong Kong**

Software Engineer
Apr 2019 – Jun 2022
(3 years 3 months)

- Engineered modern commercial platforms for clients and integrated them with AWS cloud services
- Designed, built, and maintained internal purchase system modules for companies using Java, Apache MyFaces framework, and Oracle Databases
- Automated integrations and deployments with Docker and Bash scripts
- Provided technical consultations to clients for troubleshooting issues and recommending solutions

Skills: RDS, EC2, Java 6, Apache MyFaces, Docker, bash scripting, Node.js, React, MongoDB, Microsoft SQL Server, Oracle Database, MySQL, Redshift, REST API, Linux

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BHL Technology Ltd.   **Hong Kong**

Embedded Software Engineer
Aug 2018 – Mar 2019
(8 months)

- Designed and implemented a control system for a robot utilizing Robot Operating System (ROS) on Ubuntu
- Developed remote access modules for robots using a blend of programming languages (Python, C, Node.js)
- Developed embedded system for Cortex-M3 core devices to control via CAN and drive motors/servos with PID control
- Conducted Hardware testing to ensure the system's functionality and performance
- Applied deep learning model for face detection

Skills: ROS, Python, C, Node.js, PID Control, Control System Design, REST API, CAN, Karas, Linux

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ARTRO Digital Ltd.   **Hong Kong**

Web developer (Freelance)
Jun 2017 - Apr 2018
(11 months)

- Built company websites

Skills: Node.js, React, MongoDB, MySQL, WordPress, REST API

USThing

Co-founder
- A team is made up of passionate and talented students who work towards the continual betterment of the app and the HKUST student community
- Mainly provide iOS and Android application for HKUST students
- Major Android developer in early stage
- Built and integrated CNN to solve CAPTCHA for facility booking system with approximately 98.1% accuracy

Hong Kong
Aug 2016
(1 year 9 months)

Skills: Android App Development, REST API, TensorFlow, Keras, Python

The Hong Kong University of Science and Technology

HKUST Robotics Team Member & Mentor
- Represented HKUST in 2014-2015 National Freescale SmartCar (China)
- Sub-team leader who collaborates with 15 teammates
- Developed embedded software for Cortex-M0 core device, enabling precise motor/servo control in a self-balancing car racing competition
- Implemented advanced control algorithms, such as Fuzzy PD for precise turning, a complimentary filter combined with PD for stability in the inverted pendulum system, and a P controller for speed regulation

Hong Kong
Dec 2014 - Jul 2016
(1 year 8 months)

Skills: Cortex-M0, Control System Design, PID Control, Fuzzy Logic, PCB Design, Embedded System Design, SPI, UART, I2C

SKILLS

Languages	Cantonese	(Native)
	English	(Proficient)
	Mandarin	(Proficient)
Programming Languages & Libraries	General-purpose:	C/C++, Python, Java, VisualBasic, VisualBasic.Net(VB.NET), Rust
	Web (Backend):	Node.js, Typescript
	Web (Frontend):	Javascript, jQuery, CSS, Bootstrap, HTML, React
	Database:	MySQL, MongoDB, Oracle Database, Microsoft SQL Server
	Unix:	Bash, Modulefile
	Cloud:	AWS Cloud Services (RDS, EC2, Lambda, Redshift)
	Other:	Git, OpenCV, Robot Operating System(ROS), Docker, Docker Compose
Machine Learning Tools	TensorFlow, Keras, PyTorch	
Hardware Engineering	Control System Design, Embedded System Design, Printed Circuit Board (PCB) Design, Soldering, Microcontroller Programming (STM32, STM8, Freescale Kinetis, AVR), Hardware Debugging	

EDUCATION

Hong Kong University of Science and Technology (HKUST)	**Hong Kong**
BEng in Computer Engineering	Sep 2014 - Sep 2018
Universitat Politècnica de València (UPV)	**Valencia, Spain**
Exchange student in Computer Engineering	Feb 2017 - Jun 2017

HONORS AND AWARDS

The 11th NXP® Freescale Cup Intelligent Car Competition 2016	**Changsha, China**
Second class award	Jul 2016

Designed PCB board and programmed a two-wheeled self-balancing car which is able to trace a track with crosses and turns using two inductors to sense magnetic field generated by the wire in the middle of the track

The 10th NXP® Freescale Cup Intelligent Car Competition 2015
   Merit award
   Programmed a car which is able to trace a track with crosses and sharp turns using inductors to
      sense magnetic field generated by the wire in the middle of the track