# Duy (Edward) Le

**Location:** Canberra, Australia
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Self-discipline and diligent student with system thinking mindset and collaborative skills developed through previous internship programs and volunteer engagements. Highly adaptable individual, working confidently in a diverse and multicultural environment. Strong academic background in engineering principles both in Mechanics and Electronics, maintaining above-average results. Knowledgeable graduate with good command of programming skills and design thinking mindset with some practical experience. Seeking opportunity to begin my journey to become a professional engineer.

## EDUCATION

❖ **Australian National University (ANU), Australia**
July 2019 – July 2021
*Master of Engineering (Mechatronics)*
**Academic achievements**:

- **GPA**: 6.2/7.0
- **2021**: Presentation in the Canberra Innovation Network showcase as the best performance team in Capstone Project. Topic: "Automating the Archaeological Toolkit: Mechatronics Microdrill sampling of inclusions within pottery sherds".
- Achieve "High Distinction" performance in courses: Capstone Project, Engineering Data Analytics, System Engineering, Advanced Topics in Mechatronics, Advanced Control Systems
- Achieve "Distinction" performance in courses: Robotics, Control Systems, Professional Practice, System Modelling, Digital Systems and Microprocessors, Probability and Stochastic Process.

❖ **Ho Chi Minh city University of Technology (HCMUT), Vietnam**
Sep 2013 – Oct 2018
*Bachelor of Engineering (Honours degree – PFIEV) in Mechatronics*
**Academic achievements:**

- **GPA**: 3.5/4.0
- **2018**: Top 3 highest GPA in the Bachelor program in Mechatronics (PFIEV) of HCMUT
- **2018**: Ranked 5$^{th}$ in the Bachelor graduation thesis
- **2016**: Awarded the best team of PFIEV for designing line-following robot in "Mechatronics System Design"
- **2015**: Certification for the participation in competition "Raise Your ARMs 2015" at HCMUT
- **2014 – 2018**: Academic Excellence Encouragement Scholarship, PFIEV Program, HCMUT

## RESEARCH PROJECT EXPERIENCE

- **2019-2021**: Completed with High Distinction in Research Projects of the courses at ANU:
  - "Advanced Topics in Mechatronics" (Topic: "Pseudo-LiDAR for Autonomous Driving")
  - "Advanced Control Systems" (Topic: "Routes planning for goods delivery")
  - "Control Systems" (Topic: "Altitude control of quadcopters")
  - "Engineering Data Analytics" (Topic: "Denoising images using Sparse Representation and K-SVD algorithm")
- **2018**: Completed the Bachelor Thesis under instruction of Dr. Viet-Hong Tran, title "Design & Control of the Hand Exoskeleton System".
- **2017**: Awarded "High quality academic research" in the Scientific Research Conference of PFIEV – HCMUT Students. Topic: "Mechanical Design of a Force-Feedback Hand Exoskeleton for Haptic Applications".

## WORK EXPERIENCE

❖ **TICTAG JSC COMPANY – *EMBEDDED FIRMWARE ENGINEER*** **JANUARY 2019 – APRIL 2019**

3-month internship with an information technology firm providing innovative solutions for startups and SMEs, consulting the clients with a full stack of services from software to hardware solutions.

**Key Responsibilities:**

- **Client Engagement**: worked with clients to gather stakeholder's requirements and provided general support under direct supervision of Lead Engineer, managed technical requirements and followed up key actions.
- **Research and Development**: undertook research to analyse the customer's requirements, identified key behaviours and functionality, designed the embedded system and interfaces.
- **Document writing**: prepared documentations to demonstrate the functionalities of the system "Tictag Smart Building Solution", generated the user's guide to help non-technical audiences in using the product.

- **Installation and Maintenance**: cooperated with other members in installing the hardware components and provided customer support.

  **Key Achievements**:

  Successfully developed the electrical management system for office building, maximised the saving strategies for customers, helped clients manage electrical usage effectively up to 30%, clearly provided detail instruction for the installation and maintenance of the system and for further development.

❖ **NHATTINH COMPANY – *MECHANICAL DESIGN ENGINEER*** **JUNE 2016 – SEPTEMBER 2016**

Summer internship with a Mechanical and Industrial Design firm providing engineering design, manufacture and installation of industrial machinery and equipment.

**Key Responsibilities:**

- **Client Engagement**: discussed with customers to understand their needs and generated stakeholder's requirements with the instruction of supervisor.
- **Analysis and Design**: analysed the functionalities from customer's requirements, undertook research to produce general concept of the machine, implemented 3D conceptual design in Solidworks, evaluated the performance through prototypes and simulation.
- **Report preparation**: prepared technical reports and blueprints with the assistance of Lead Engineer, provided detail of technical issues, installation and maintenance instructions.
- **Customer support**: discussed with clients about the conceptual design of the machine, received feedbacks and adjusted the design to satisfy other requirements.

**Key Achievements**:

Successfully developed conceptual design for the fabric cutting machine, proved that the design can satisfy customer's requirement and achieve required performance, clearly provided detail report for manufacturing and installation.

## VOLUNTEER PLACEMENTS

**Humanitarian and Sustainable Project – Unbound 2021** **DECEMBER 2021 – FEBRUARY 2021**

By joining this Global Social Impact Program, I had the opportunity to meet many social entrepreneurs from different places around the globe, listen to their story and learn from their own experiences. This is a place where I can practice my skills in observation, problem-solving, ideation, and decision making.

## KEY COMPETENCIES

**Skills:**

- ***Programming language***: C/C++, Java, Python, MATLAB
- ***AutoCAD, SolidWorks***: 3D Conceptual design and technical drawing
- ***MATLAB Simulink, Simmechanics, ANSYS***: Simulation and structural analysis
- ***Altium***: Electronic design (PCB) at primary level
- ***Microcontrollers and FPGA***: design electronic systems using FPGAs (Verilog), PICs and AVRs

**Languages**:

English (advanced), Vietnamese (native), French (intermediate).