Vojin Lukic

Email: **vojin.lukic@gmail.com**
Hong Kong contact:**+85290458724** | Serbian contact:**+381637674564**
LinkedIn: **linkedin.com/in/vojinlukic** | Portfolio: **vojinlukic02.github.io/**

Education

City University of Hong Kong - Hong Kong SAR
BEng Mechanical Engineering *Sep 2020 - present*

- Current **CGPA 4.15** - member of Talents Programme, Dean's List, recepient of Full Tuition Scholarship and College of Engineering Dean's Scholarship, HKSAR Government Scholarship, Cheung Foundation Scholarship

Mathematical Grammar School - Belgrade, Serbia
Gifted students in mathematics, physics and computer science - High School Diploma *Sep 2016 - May 2020*

- **CGPA 5.00/5.00**, participation and awards at **National Contests** in mathematics and physics

Experience

Imperial College London - London, United Kingdom
Tribology Group Researcher *May 2023 - Aug 2023*

- Conducted **spectroscopic and viscometric analyses** to investigate and quantify underlying chemical processes during oil oxidation
- Designed and implemented an automated apparatus with **PID Control** using **LabVIEW** software for precise temperature control, that will be used by the lab in the future
- **Personally constructed the rig**, that will be utilized by the lab, and researched the autooxidation process of oil in various gaseous environment, that can run **multiple tests at once**

Albacastor Technology Limited - Hong Kong SAR
Mechanical Engineering Intern *Jun 2022 - Aug 2022*

- Developed a **cost-effective** and compact advertising **robot prototype** using **Solidworks**
- Ran **fluid simulations** with **Solidworks** and **ANSYS Discovery AIM** for an outdoor ventilation system
- Conducted complex surface modeling for a security device mount using **reverse engineering techniques**

Projects

Audi R8 body - CATIA

- Utilized CATIA V5 software to design and assemble the body of an Audi R8, incorporating finished parts such as side-view mirrors and tires, while ghosting collegues that worked on more complex design parts of **current manufacturing and design of BMW vehicles**.
- Demonstrated proficiency in CATIA V5 by seamlessly integrating **complex design elements** to create a visually stunning and functional Audi R8 body.

Hybl Turbines H16 Jet engine - Fusion 360

- Designed and animated Hybl Turbines H16 Jet engine with Autodesk Fusion360 modelling software.
- Employed **Fusion360's advanced tools** to meticulously craft each component, ensuring optimal performance of the jet engine design.

Engineering Workshop - Wide range of machines

- Gained hands-on practice for **milling** and **drilling** machines, **lathe**, and **3D printing**, producing various parts.
- Developed a comprehensive understanding of manufacturing processes, from conceptualization to tangible realization, through proficient operation of a diverse array of machines.

Windmill University Project - QBlade and Xrotor

- Designed turbine blades that achieve **highest energy to mass ratio**, utilizing familiar **Betz/Schmits/Linear optimization techniques**.
- Overcame challenges associated with 3D printing, resolving issues related to **production of thin edges** of the windmill blades while maintaining precision and performance (Generates around **1300 mJ** in **60s**).

Line Tracking Robot - Arduino & PID

- Designed, coded and tested a robot capable of **following a specified black path**, even in the presence of **missing black segments**.
- Applied expertise in **Arduino** technology and **PID control** to create a precise and adaptable line tracking robot with exceptional performance (rated in number of circulations of track in specified time).

Skills

Programming Languages (Python, C/C++, C#, Prolog, SQL, HTML, PHP, CSS), MATLAB, *Engineering sofware* (Fusion360, Solidworks, CATIA V5, ANSYS, LabVIEW), Autodesk AutoCAD, Microsoft Office, *Manufacturing Capabilities* (Milling and Drilling machine, Lathe, Technical Drawings, 3D Printing), *Chemical Analysis* (UV-vis, FTIR, Viscometer)