

Abhinandan Thour

PERSONAL INFORMATION:

Address: Flat 3, Duvall Court, Merton Road, Slough, SL1 1QA, UK

Contact Details: 07384842510
thourabhinandan@gmail.com
[linkedin.com/in/abhinandan-thour-42359b193/](https://www.linkedin.com/in/abhinandan-thour-42359b193/)

WORK EXPERIENCE:

VPI Manufacturing Engineer – Year Long Placement

Cummins Inc.

Daventry, UK (From 08/2022)

- Worked with the VPI team to introduce and support projects ranging in maturity over 2 production lines on engine size 38L, 45L, 50L, 60L and 78L.
- Gained hands-on experience assembling engine components.
- Presented manufacturing content in component design reviews and engine integration meetings to international teams.
- Assessed assembly capability of a variety of new, unique and different components by completing virtual and physical fit checks.
- Produced Process Documentation detailing assembly instructions for new and existing products in compliance with Cummins Engineering Standards (CES) and plant quality processes.

Mechanical Design Engineer – Summer internship

New Motion Lab Ltd.

London, UK (08/2020)

- Provided research and development skills regarding the design of a new transmission chain with a new method of power transmission using both sides of the sprocket tooth. Worked on solutions to reduce the chain wear and improve the engagement with the pinion keeping high efficiency.
- Worked on transmission chain testing and on data analysis from physical tests and simulations of different prototypes of the mechanism (Sound tests, wear tests, heat simulations, forces distribution simulations).
- Managed own project and its objectives alongside team meetings and group work.

Mechanic and Mechatronic Technician

CMF SRL.

Cremona, Italy (2016 - 2019)

- Operated on CNC machines and CAD software following the customer needs and ISO and UNI standards.
- Assembled and disassembled mechanical parts of industrial CNC machines such as robotic arms, motors and electronic components.
- Analysed industrial machinery functions, their individual components and the thinking behind them (lubrication, electric circuits, different materials).

EDUCATION:

Mechanical Engineering / Aerospace Engineering MEng

University of Southampton

Southampton, UK (From 09/2020)

Third Year with following modules:

Finite Element Analysis in Solid Mechanics; Aerothermodynamics; Manufacturing and Materials; Wing Aerodynamics.

Dissertation: Solid Lubrication in Space (Nitrogen doped MoS₂).

Second Year modules:

Electronics Drives and Control; Thermodynamics; Fluid Mechanics; Materials and Structures; Mechanics, Machines & Vibration.

Group Projects: Aircraft Recycling Business Plan, Eurobot, Introduction of Energy Storage systems from renewable sources.

Mechanical Engineering BEng (Av. 89% - 4.41 GPA)

University of Hertfordshire

Hatfield, UK (09/2019 - 06/2020)

Key modules:

Introduction to Design; Engineering Application of Mathematics; Fluid Mechanics & Thermodynamics; Materials and Electrical Science; Mechanical Science.

PERSONAL SKILLS:

Languages:

Italian, English (IELTS), Hindi, Punjabi

Technical skills:

- **CAD** – Started during my first year in Secondary School with AutoCAD, learned how to read technical drawings and how to make one at industry standard, followed up with Inventor and SolidWorks during my exchange year in Ireland, modelled and animated simple machines parts and car models. Through university, worked on IMechE projects such as ball launcher and Boeing sponsored project with an autonomous collecting robot.
- **Manufacturing** – Expanded my portfolio of machines and processes used to manufacture parts. Began from bending and drilling machine to work autonomously on the lathe, milling machine, both manual and CNC (coded with Fanuc), welding and 3D printing (Shielded metal arc) throughout manufacturing projects such as machine parts and go-kart models.
- **PLC (Programmable Logic Controllers)** – Programmed PLC computers through block diagrams which were then uploaded in the machine and used to send signals to pneumatic pistons in a specific order and speed.

Soft Skill

- **Interpersonal** – Have lived in four different countries with totally different cultures, being adaptive and being able to communicate effectively, helped me establish connections with people. The same skill allowed me to succeed with customer service while working in a fast-food restaurant, volunteering and work experiences
- **Time management** - Fundamental while playing in chess tournaments. Key skill while working in a start-up with strict deadlines as well.

EXTRACURRICULAR ACTIVITIES

Covid-19 Volunteer

Slough, UK (06/2021 – 09/2021)

- Led the team to a successful shift by assigning tasks and goals at the beginning of the day.
- Trained members on how to excel in each station around the facility.
- Allowed nurses and doctors to work smoothly by organizing people in sub-groups depending on their vaccination and their situation such as pregnancy and disability.
- Interacted with people to make sure their experience is as pleasant as possible as many people are concerned about the vaccination program and why it is suggested by the NHS.
- Helped nurses dealing with post-vaccination reactions such as sudden fainting.

Erasmus +

Craiova, Romania (04/2018)

- Workshops on prospective to live on Mars and introduction to environment changes and space travelling.
- Discussion and creating new connections between people from different countries during workshops.
- Learnt how to interact with people while working in an unfamiliar circumstance abroad.

INTERESTS AND HOBBIES:

- **Coding** – Good knowledge of HTML, CSS and Basic knowledge of Java and Python, currently building my own website doing a 16 weeklong edX course on Front-End Developer.
- **Entrepreneurship** - Repairing and reselling laptops; started with broken laptops trying to fix them and sell them for a profit, interesting and challenging as I get to study how they work before trying to fix them.