Yohann Panthakee

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CAREER PROFILE

A team driven, passionate, and proactive graduate Automotive Engineer with strong capabilities in engineering design and numerical analysis and a keen interest in motorsport and AI. A leader who is eager to take on challenging projects requiring a superior performance dedication, efficiency to get any task done on schedule. Proficient communication skills enable me to effectively communicate with people at all levels within a team. Currently looking for opportunity to apply my technical skills to a challenging work environment with the goal of putting all my knowledge and experience into practice to start a successful career within motorsport.

KEY ACHIEVEMENTS

- Achieved a level of Expert in SolidWorks software for Mechanical Design along with Professional level in Advanced Surfacing, Sheet Metal, Technical Drawings, Weldments
- Represented Camden Swiss cottage swimming club at The Middlesex Championships and London Regionals from 2008-2011
- Selected to attend the GB Talent age group Water Polo trials in Cardiff in September 2012
- Selected to presented at an IET event as part of the Formula Student AI team on the topics of AI & Neural Networks and electrification in motorsport.
- Completed a research design project for my A-Level EPQ in 2017
    - Titled: “Is there a device that generates useful power from the waste energy of a car?”
- Promoted to the rank of a “CORPORAL” in the CCF-Army section giving me a leadership position

EDUCATION

MSc Advanced Motorsport Engineering: Cranfield University (October 2021 – Present)

BEng Automotive Engineering: Coventry University – 1st Class Honours (2018 – 2021)

- **Modules:** Manufacturing & Materials, Vehicle Systems, MATLAB and Simulink for Research in Industry, Finite Element Analysis, Analytical Modelling, Automotive Engines and Vehicle Aerodynamics
- **Group Design Project:** The redesign of the front suspension system for the Sparrowhawk including a detailed report including, industry research, FEA analysis, and CAD designs with technical drawings.
- **Individual Thesis**: Developed of a cost function-based path planning system for Formula Student AI competition

PROFESSIONAL WORK EXPERIENCE

Dassault Systems (Cambridge) - *Quality Assurance* Intern **1st July – 30th August 2019**

- Collaborated with the quality assurance team for Solidworks Electrical Products
- Formulated test plans, reporting, and validating bugs in Solidworks software
- Communicated with other QA engineers in UK and US
- Achieved Certified Expert in Mechanical Design in SolidWorks and other Solidworks professional certifications

Bentley (Crewe) **30th – 3rd Aug 2018**

- Applied problem solving skills to the production line
- Gained practical experience as well as deepening my knowledge in additive manufacturing
- Presented an improvement increasing time efficiency in the workshop

Ricardo (Shoreham-by-Sea) **16th – 23rd July 2018**

- Introduction to MATLAB SIMULINK
- Working with PTC Creo surface design for metal castings
- Gained a deeper understanding of the principles for "Design for Manufacture"

Airbus (Filton) **17th to 21st July 2017**

- Gained experience in metal additive manufacturing and “Design for Manufacture” concepts
- Learnt about low/high cycle fatigue testing of wing structures and components
- Achieved Silver level Industrial Cadet certification during my work experience at Airbus

McLaren Applied Technologies (Woking) **19th to 23rd June 2017**

- Worked on pre-race testing in the driver in the loop simulator.
- Listened in to the post race debrief between the drivers and engineers.
- Discussed my EPQ Research Project with their design engineers to receive feedback on areas of improvement

Formula Student Artificial Intelligence Competition (FSAI)

- **2020 competition:** Co-developed the Computer Vison system using Python. Took part in the Static events where I wrote and presented the Autonomous design presentation while contributing to the real-world AI and Simulation Development presentations.
- **2021 competition:** Developer of the path planning algorithm logic using random incremental path generation approach and a costing function. Contributed to all the presentations for the Static events. Selected to compete at Silverstone where I was the Autonomous System Responsible (ASR) giving me responsibility in keeping the team safe when competing and testing. As well as being the team expert in all the mechanical and running aspects of the car.

SKILLS, INTERESTS & EXTRACURRICULAR ACTIVITIES

- **Language:** Fluent English
- **IT Skills:** Confident user of the MS Office suite of products with a ECDL Certification in advance spreadsheets. Knowledge of ANSYS Mechanical and Fluent, Altair HyperMesh, CATIA, SolidWorks, Fusion 360, MATLAB/Simulink, Python Programming language
- **Individual Interests:** Developing my project portfolio with a wide range of engineering related projects. Going to the Gym and keeping myself fit. Cooking for friends and experimenting with new recipes. Running my online engineering group titled “Cars and Automotive Design”
- **Memberships:** IMechE Student Affiliate Member
- **Charity:** Participated in multiple charity school swims. Helped in my next-door neighbor coffee mornings.
- **Other Achievements:**
  - Selected to be a Design Technology Ambassador for Mill Hill School’s DT department
  - Achieved EV Safety Awareness Certification awarded by IMechE in 2021
  - Represented Mill Hill School for the 2016 Arkwright Scholarship

References available upon request