DHRUVA TEJA TURAGA | Curriculum Vitae

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GitHub • LinkedIn • Project Portfolio

Summary

I am an Aeronautical Engineering student at Imperial College London with experience in mechanical design, simulation and data analysis. I have worked on virtual reality simulations, structural dynamics as well as software development, applying engineering principles to real-world problems. Skilled in C, Python, C++ and computational modelling, I am passionate about aerospace structures, propulsion and space technology. I thrive in problem-solving environments and always love to seek opportunities to contribute to cutting-edge space projects. You can explore my portfolio through the link above.

Education

BOURNE GRAMMAR SCHOOL
09/2016 - 06/2021
Bourne, Lincolnshire

GCSE
Grades: Mathematics 9, Further Mathematics 9, Biology 9, Chemistry 9, Physics 9, Design & Technology 9, Computer Science 9, Geography 9, English Literature 9, English Language 9, Spanish 7

BOURNE GRAMMAR SCHOOL
09/2021 - 06/2023
Bourne, Lincolnshire

A-Level
Grades: Mathematics A*,Computer Science A*, Physics A, Further Mathematics A, EPQ A*

IMPERIAL COLLEGE LONDON
10/2023 - Current
South Kensington, London

MEng Aeronautical Engineering
Subjects Mechanics, Materials, Mathematics, Structures, Thermodynamics, Intro to Aerospace, Aerodynamics, Computing and Numerical Methods, Engineering Practice

Experience

PYTHON DATA ANALYST SHADOWING
06/2022 - 07/2022
Peterborough, UK

Compare the Market

- Completed an intensive shadowing at Compare the Market, focusing on **ADVANCED DATA ANALYSIS** techniques using Python.
- Worked closely with the data science team, gaining practical experience in **DATA CLEANING**, **MANIPULATION** and **VISUALISATION** using libraries such as **PANDAS** and **MATPLOTLIB**.
- Actively contributed to data-driven decision-making processes, leveraging statistical analysis to uncover actionable insights in real-world business scenarios.
- Developed a deep understanding of how **ANALYTICAL MODELS** and **DATA INTERPRETATION** are applied to optimise key business operations and strategies while honing problem-solving skills in a fast-paced environment.

STUDENTSHAPERS INTERN AND UG TEACHING ASSISTANT
07/2024 - 10/2024
South Kensington, London

Imperial College London - Video Outcome

- Completed a Student Shapers internship at Imperial College London, mastering **C#** programming, **UNITY 3D GAME DEVELOPMENT** and the cutting-edge **VIRSE** framework.
- Collaborating with renowned professors on advanced virtual reality, focusing on the **DYNAMIC MODAL ANALYSIS OF FREE OSCILLATIONS** structures in beams and entire aircrafts.
- Applied innovative VR techniques to simulate and test **STRUCTURAL EFFECTIVENESS**, contributing to groundbreaking research in the field and curriculum at Imperial.
- Overcame a steep learning curve and a challenging commute to fully immerse in this highly impactful internship showcasing dedication, resilience and a passion for technological innovation.

Skills

PROGRAMMING LANGUAGE	**Experienced:** Python 3 | MATLAB | C++ | Kotlin | Java | SQL | LaTeX | C#
FRAMEWORKS & IDES	Excel | Git | Raspbian | LINUX | Jupyter | Pycharm | Android Studio
LIBRARIES	Matplotlib | Numpy | Pandas | Seaborn | Dash | Scikit-learn | PyTorch | SciPy
DESIGN	SOLIDWORKS | Fusion360 | 3DExperience | Blender | Maya 3D-Animation | CircuitWizard | KiCAD | 3D Printing
LANGUAGES	**Native:** Telugu | **Fluent:** English | **Intermediate:** Hindi | Spanish

Awards

BEST IN ENGINEERING 6 CONSECUTIVE YEARS
05/2016 - 05/2022

Bourne Grammar School — Bourne, Lincolnshire

- Consistently recognised as a leader in engineering for six years, showcasing excellence, innovation, and superior results in projects and solutions.
- Demonstrated continuous improvement, high standards, and positive impact, earning accolades and trust while driving progress in the field.

BRONZE, SILVER & GOLD DUKE OF EDINBURGH
10/2019 - 10/2023

Bourne Grammar School — Yorkshire Dales

- Earned the Bronze, Silver, and Gold Duke of Edinburgh Awards, showcasing commitment, resilience, and leadership through diverse outdoor and community-focused challenges.

WON CGCU ENGINEERING HACKATHON
05/2024 - 05/2024

Imperial College London — South Kensington, London

- Led the team to success when it came to thinking of an original idea to showcase in front of everyone else to tackle an engineering problem with the Arduino components available.
- Demonstrated adeptness in both Arduino electronic design and computer science to develop a way for plants to communicate their feelings to allow them to tell us what is needed like water and nutrients with a selection of sensor components.

Activities

SWIMMING
10/2019 - 10/2023

Extracurricular — England

- Participated in professional swimming competitions nationwide, demonstrating exceptional skill, dedication, and competitiveness in the sport of swimming.

BADMINTON
10/2022 - Current

Extracurricular — England

- Coaching and participating in county badminton with ongoing dedication and enthusiasm.

IMPERIAL COLLEGE LONDON ROCKETRY
10/2023 - Current

Imperial College London — South Kensington, London

- Integral member of Imperial College London Rocketry Team's electronics division, adept in designing complex circuits using KiCAD, collaborating effectively with Git and GitKraken and ensuring precise integration with CAD for optimal placement on the ground station and within the rocket.
- Contributed expertise in electronics to construct circuits tailored for rocketry applications, leveraging knowledge of KiCAD for circuit design and Git with GitKraken for streamlined collaboration and project success.
- Utilised CAD to ensure electronic components were strategically placed within the rocket, facilitating optimal performance and reliability in propelling rockets to high altitudes accurately and consistently.