

Catherine Hocknell

DATA ANALYST & MECHANICAL ENGINEER

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PROFILE

Initially trained as a Mechanical Engineer with five years of experience working in the Aerospace industry in the UK. Branching out into Data Analytics to follow my passion for problem-solving and interest in data-driven decision-making.

SKILLS

Data Science

SQL, Python, R, Hypothesis Testing, A/B tests, Parametric and non-Parametric tests, Tableau, Microsoft Power BI, Data Visualization, Machine Learning in scikit-learn, Tensorflow, Keras, Pytorch, AWS, Hadoop, Spark, Hive, Docker, Flask, Git, Streamlit

Mechanical Engineering

Green Belt, Project Management, Agile Methodology, Microsoft Excel, Technical Report Writing, Technical Presentations, 3D CAD and Analysis Software, Systems Engineering, Robust Design

EXPERIENCE

Teaching Assistant, Data Science Diploma Program | BrainStation

APRIL 2023 - JUNE 2023, VANCOUVER, CANADA

- Graded SQL, Tableau, and Python assignments, and provided feedback on progress for ten students.
- Conducted daily 30-minute kick-off sessions to review and teach new content on statistics, data visualization, and various machine learning algorithms.
- Provided support and guidance to ten students in developing Data Science Capstone projects, ranging from Time Series Analysis to Neural Networks.

Component Design Engineer | Aero Gearbox International

JAN 2020 - NOV 2022, DERBY, UK (ROLLS-ROYCE SECONDMENT)

- Managed certification activities for a new engine variant by assessing new requirements and flight data against current designs and evaluating findings alongside senior engineers throughout the UK, France, and Germany.
- Analyzed in-service issues then piloted design change projects to resolve them, liaising with both the customer and the supplier.
- Facilitated the company-wide software for knowledge management, tracking over 30 KPIs and supporting continuous improvement throughout the wider business.
- Documented methodology and conclusions in both in-depth technical reports, and clear and concise data-driven presentations.

Engineering Graduate Trainee | Rolls-Royce

SEP 2017 - JAN 2020, DERBY, UK

- Maintained the budget of a customer while designing and manufacturing a test rig to successfully meet their requirements within the 10-week deadline.
- Administered workshops and training days in Agile working, Scrums, and the 'Digital Mindset' for employees throughout the company.
- Evaluated, designed, and executed an initial concept pitch to a customer which was then selected for the next design phase.

Tender and Construction Intern | Siemens

AUG 2015, LIVINGSTON, UK

- Developed an Excel-based subcontractor cost comparison tool to increase efficiency when preparing project quotes.

EDUCATION

BrainStation | Diploma, Data Science

JAN 2023 - APR 2023, VANCOUVER, CANADA

University of Exeter | MEng Mechanical Engineering

SEP 2012 - JUL 2016, EXETER, UK

- 1st Class Degree

PROJECTS

Individual Project | [Movie Review Analysis](#)

APRIL 2023, BRAINSTATION CAPSTONE PROJECT

- Utilized NLP, pipelines and machine learning models to predict movie review sentiment to 80% accuracy.
- Generated content based, user based and collaborative recommender systems based on movie descriptions and reviews.