



Harry Byrne

Phone: 07538132291

E-mail: harry.david.byrne@gmail.com

Design Portfolio: www.harry-byrne-design.com

Detail-oriented third year Mechanical Engineering student, currently on track to graduate with a First-Class Honours degree. Dassault Systèmes certified to associate level in SolidWorks Design, Simulation (FEA), and additive manufacturing, with proficiency in both solid and surface modelling. Short term industry experience in an engineering design office and a student member of the IMechE with a strong interest in mechanical design, analysis, and Manufacturing.

Education

2018 – Present

MEng (Hons), Mechanical Engineering, University of Manchester

Relevant modules: Design; Manufacturing; Materials; Mechanics; Modelling and Simulation; Thermodynamics; Fluid Mechanics; Mechanical Systems; Vibrations and Aeroelasticity.

Current final year individual project: a manufacturing research paper on the design and analysis of a modular wheel nut fastening tool intended to speed up an automotive production line.

2014 – 2016

Loreto College – A-Levels: Maths (A) Physics (B) 3D Design (B)

2009 – 2014

St. Ambrose Barlow RC High School – 10 GCSEs: Grades A* - B

Work Experience

2016 – Present

Bartender, Greene King, Manchester

Currently employed part-time in the hospitality industry, recognised as a reliable and adaptable team player with strong communication and interpersonal skills. Trusted with managerial responsibilities such as shift management and task delegation.

2016 – 1 week

Howarth Air Technologies, Bolton

Integrated into a team of mechanical and control engineers working on the design of a biological containment isolator. Built up a basic understanding of the whole engineering design and manufacturing process. Involved in basic solid modelling using Autodesk Inventor, basic Siemens PLC programming, and basic workshop skills on the shop floor.

Achievements

- Second year group design project, conceptualised and designed a small portable lathe for educational use, achieving a near perfect grade of 98%.
- CSWA (Certified SolidWorks Associate), CSWA - Simulation and CSWA - Additive Manufacturing.



- www.LearnSolidworks.com – Full 3D modelling of an American Chopper and Aston Martin One-77 (see portfolio).
- Developed a concept V-twin engine and transmission down to near component level (see portfolio).
- Employee of the month several times during my current employment for dedication, exceeding company targets and taking initiative on shift.

Skills

Engineering Software: SolidWorks (solid and surface modelling), SolidWorks Simulation (FEA and CFD), SolidWorks Visualise, MATLAB, MATHCAD, ANSYS Workbench, Autodesk Inventor.

IT: Microsoft office, including Word, PowerPoint, Excel, Outlook, and Project.

References

Dr Amir Keshmiri

Academic Advisor

University of Manchester

Oxford Rd, Manchester

M13 9PL

Email: a.keshmiri@manchester.ac.uk

Olivia Smith

Deputy Manager

Greene King

The White Horse, 350 Worsley Rd

M27 0FH

Email: 6954@greeneking.co.uk

(please address enquires to Olivia)