Patric Boardman - CV

Tel: +44 7465 990 676 • Email: pazzy.boardman@mac.com • Web: pazzyboardman449.github.io • UK

First class University of Exeter physics graduate aspiring for a career in science.

EDUCATION

Sep 2017 - Jun 2021
MPhys Class I

First class integrated master's degree in physics with honours in physics.

SKILLS

Languages

- Julia
- Python (NumPy, Pandas, scikit-learn)
- MATLAB
- LaTeX
- R
- SQL (PostgreSQL)
- C (Module in University, Grade: First)
- HTML & CSS

Software

- GitHub
- Jupyter Notebooks
- VS Basic
- Microsoft Office (Word, PowerPoint, Excel, Outlook, Teams, etc)
- Zoom
- Endnote
- Adobe Creative Cloud (Illustrator, Photoshop, InDesign)

CERTIFICATIONS

- The Complete SQL Bootcamp - Udemy certification (Jan 2023)
- Equality and diversity training certification (2022)
- Dean's Commendation for outstanding academic performance (2018, 2019)

EXPERIENCE

Jun 2022 – Jan 2023: Student Teacher, University of Exeter

- Delivered physics and chemistry lessons to groups of school pupils or adults. Communicated information clearly, assessed team understanding and demonstrated fundamental scientific knowledge. Constructed PowerPoint presentations and planned lesson activities focusing on teamwork, collaboration and idea-sharing.
- Wrote a 4000-word essay on the clarification of misconceptions in maths and physics, which required referencing, research, literature critique and qualitative writing.

Sep 2021 – Jun 2022: Postgraduate Researcher, University of Exeter

- Undertook novel research as part of a team into improving the image contrast of biological tissue using THz waves. I mostly focused on the computational modelling, but also underwent laboratory work.
- Developed Python programmes that read in THz data and extracted the refractive index from a series laboratory measurements on a sample. I then used linear regression analysis to translate this into water saturation within these tissues.
- Attended the Terrabotics consortium event at the University of Warwick in May 2022, sharing our teams findings with other researchers and stakeholders.
- Taught the problems classes to undergraduate physics students, which involved marking assignments and then demonstrating the solutions.

Apr 2020 - Sep 2020: iGEM 2020 Team Member, University of Exeter

- Worked as part of an interdisciplinary team utilising engineered bacteria to 3D print Calcium Carbonate crystal structures, initially as a proof of concept.
- Developed Python and MATLAB and programmes that used finite difference to solve first order differential equations to simulate the mechanical properties of the materials of hydrogels for the printer.
- Earned a gold medal in the competition. Full details of the criteria can be found at 2020.igem.org/Judging/Medals.

Jun 2016 - Aug 2017: Website and Graphic Designer:

- Developed of a range of websites using HTML and CSS and helped maintain existing websites by using WordPress, ensuring they are responsive and implementing search engine optimisation (SEO).
- Designed several logos, websites, brands, and illustrative package designs for a wide range of clients.
- Communicated directly with clients over various tasks.

OTHER RELEVANT EXPERIENCE

Jan 2023 - Present: Python for Data Science and ML Bootcamp

Udemy course focussing on data analysis, visualisation and machine learning algorithms.

Jan 2020 - Jun 2021: Masters Project and Dissertation

Developed a Python programme that used contour image analysis to detect a measurable difference in the mechanical properties of *in-vitro* red blood cells.