

MATTHEW FERRIER

🏠 Sheffield, S6 📞 07846308613 ✉ mat_ferrier@hotmail.com

PROFILE

Enthusiastic and inquisitive PhD graduate, with a strong background in mathematics, looking to work in an exciting environment involving science and technology. Confident writer, experienced in producing mathematical work including research presentations and teaching materials. Professional and conscientious attitude to work, not afraid to own up to mistakes and eager to rectify gaps in my skills and knowledge. Determined learner, capable of digesting technical and abstract concepts with a focus on finding the intuition behind complex ideas. Enjoyer of problem solving, especially the logical and methodical work required for mathematical proof writing and computer programming. Keen interest in general science and engineering with experience of working in an electronics workshop operating within an ISO 9001 quality management system. IT literate with experience of programming.

WRITING EXPERIENCE & INTERESTS

I am registered as a junior member of the ISTC.

I have completed the pre-class material of Google's Technical Writing One and Two courses. I am using AsciiDoc to write up my notes and responses to the exercises, and I am using Antora to build a static site from these notes.

I have used L^AT_EX to write up my MSc and PhD theses plus lecture notes and university teaching materials. This CV has also been created using L^AT_EX. Additionally I have academic experience with HTML and CSS.

I enjoy the process of writing about technical topics, especially making traditionally difficult topics accessible. I intend my writing to appeal to those new to the topic, and am especially conscious of the difficulties people can experience when reading something for the first time. I get a lot of satisfaction from translating raw information into a final, polished document. I have experience of using markup language, specifically L^AT_EX and AsciiDoc, as detailed above.

SKILLS & EXPERIENCE

<i>Problem solving</i>	Evidenced by my academic record, with experience of working on problems with no readily available solutions from PhD work.
<i>Mathematics</i>	10 years of undergraduate and postgraduate study covering a range of topics in pure maths. Most research material I covered was self taught. The majority of taught modules I passed with marks of 70-80% or more.
<i>Communication</i>	I take pride in the quality of my exposition and understand the importance of pitching technical material at the right level. I have presented math research to specialists at international conferences, and locally to people with a broad range of technical backgrounds. In both scenarios I received feedback that everyone could learn something from my talks.
<i>Learning</i>	I enjoy learning, especially technical topics and the intricacies of why things work. I'm not put off if I don't understand something on my first encounter. For a recent example, I have taught myself enough about electronics to successfully work professionally in an electronics workshop.
<i>Proofreading</i>	You can't write a math thesis without proving a few results. Writing good proofs is an art form. Being able to check that they are correct is another matter. I have been involved with the marking of undergraduate homework, my favourite part of which was pinpointing and explaining precisely what errors existed in student's solutions.
<i>Programming experience</i>	Java, C#, Python, R, gained from college work, undergraduate work, postgraduate work and personal projects. I enjoy the challenge of programming and am increasingly interested in areas like machine learning and 3D graphics.

EDUCATION

PhD in Mathematics - The University of Sheffield

December 2018 - March 2023 Thesis: Morita Equivalence for C^* -Categories, supervised by Dr. Paul Mitchener. My project was in the area of non-commutative geometry and combined functional analysis and category theory to develop tools to study Hilbert modules over C^* -categories, and explain in more detail existing constructions used in present literature.

MSc in Mathematics - The University of Leeds

September 2017 - September 2018 Graduated with distinction. Thesis: Banach and C^* -algebras. Modules in pure maths including functional analysis, set theory, geometry and algebra.

BSc in Mathematics - The University of Sheffield

September 2013 - June 2017 Graduated with first class Honours. Modules in pure maths including complex analysis, knot theory, scientific computing and metric spaces.

EMPLOYMENT HISTORY

Service Technician - Numed Healthcare

October 2023 - Present Service, calibration and repair of portable medical devices including spirometers, blood pressure monitors and ECG machines. Individual items worth up to £5000. Fault finding to board and component level. Electrical safety testing using IEC 62353 direct method. Use of Sage 200 software for completing job cards and stock control. Experience liaising with manufacturer's to set up service exchanges for faulty devices.

Team Member - YHA Castleton

April 2023 - October 2023 Working on reception, in the kitchen and daily housekeeping at one of the Peak District's biggest and busiest youth hostels. Responsibilities include checking guests in and out, taking card and cash payments, cashing up and locking up the hostel for the night. We received regular email feedback from guests and group leaders praising the level of customer service we provide.

Brewery Operative - Thornbridge Brewery

November 2022 - April 2023 Washing and filling casks, working on the canning/bottling production lines and generally keeping the place clean and tidy. The role involved a lot of manual handling up to 50kg, and working with chemicals.

Team Member - YHA Hathersage

July 2022 - November 2022 Part time work, for the last few months of the hostel's 2022 season. The role required working solo on reception in the evenings and working with other staff members to cook and serve breakfast, and completing housekeeping tasks during the day.

Graduate Teaching Assistant - The University of Sheffield

September 2019 - June 2022 Paid work leading and assisting in tutorials for 1st and 2nd year undergraduates, and marking homework. Responsibilities included giving verbal and written feedback on student's work, planning and leading tutorials, and admin duties such as taking attendance and reporting issues to module leaders.

HOBBIES & INTERESTS

I have a keen interest in the outdoors and outdoor pursuits. I have gone hiking for many years with my family and since 2009 I have been an active climber. I am a serial tinkerer, and find it difficult to own something without knowing how it works, or taking it apart. I also enjoy cooking and gardening, although I am strictly an amateur at the latter. Following the birth of my son in 2022, my weekends often involve chasing our toddler around local parks.

REFERENCES

Dr. Paul Mitchener

Room J20, Hicks Building
The University of Sheffield
Sheffield, S3 7RH

p.mitchener@sheffield.ac.uk
01142223858

Mr. Ian Priddle

YHA Castleton Losehill Hall
Hope Valley
S33 8WB

castletonmanager@yha.org.uk
03453719628