William Fayers

*Dedicated and flexible undergraduate student seeking a placement year to apply my academic knowledge and skills in a practical environment.*

* Second-Year Student
* Seeking a Year in Industry

### 07578 127943 / [william@fayers.com](mailto:william@fayers.com)

## Experience

**Research Team Member, University of Lincoln** (*Oct 2024 - present*)

* Collaborated with a multidisciplinary team of peers to complete a competitor analysis for Lone Star UK.
* Used analytical tools and methodologies to assess key competitors, engaging in regular team meeting to share insights and develop recommendations, enhancing communication and teamwork skills.
* Presented findings to stakeholders, demonstrating public speaking and presentation abilities while receiving feedback for continuous improvement.

**Research Team Member, British Sugar Biofuel Plant** (*Feb 2022 - Dec 2022*)

* Collaborated with students and professionals to identify inefficiencies in biofuel production, developing the ability to work within a team successfully.
* Applied and developed public speaking skills when presenting findings to staff and actively participating in meetings.

**Self-Employed Tutor** (*Oct 2020 - present*)

* Tutored Mathematics, Chemistry, and Physics to GCSE and A-Level students, carefully listening to their needs to foster a supportive learning environment.
* Effectively communicated with students and parents to address weaker points in the student's education.
* Managed all marketing and finances, including invoicing, advertising, and cash handling, in addition to delivery of tuition.
* Modelled financial data to calculate suitable pricing that maintains consistent profit despite occasional cancellations, while also mitigating costs for disadvantaged students.

**Volunteer, Air Cadets** (*Sept 2017 - Feb 2020*)

* Participated in community service events and projects with other cadets, positively interacting with the community and supporting other volunteers with their responsibilities.
* Worked within my squadron to deliver on the tasks given, communicating within the team and using initiative to complete essential tasks proactively.

## Education

[University of Lincoln](https://www.lincoln.ac.uk/) - Lincoln, England *(2023 - present)*

**Bachelor of Science (Honours)** in Mathematics, second-year student: on track for First Class (96% average).

* Applied organisational and teamwork skills collaborating on a group project, communicating effectively with other group members.

[Abbeygate Sixth Form College](https://abbeygatesfc.ac.uk) - Bury St Edmunds, England *(2021 - 2023)*

**A-Levels**: Level 3 Extended Project (A), Mathematics (A), Further Mathematics (B), Chemistry (C), and Physics (C).

* Held multiple leadership roles, including Secretary of the Student Union managing communication between students and staff and organising the Union, as well as an Ambassador role to represent my college during open days and within the community.

[County High School](https://www.countyhigh.uk) - Bury St Edmunds, England *(2018 - 2021)*

**GCSEs**: Free-Standing Mathematics Qualification (A), English Language (8), six other subjects (8), Mathematics (7), three other subjects (7).

* Participated in foreign exchange programs to explore new cultures and practise adapting to new situations.

## Projects

* **Morning Briefing Generator**: Collates news sources, emails, notifications, and weather; generates a chess puzzle; converts to a custom speech model for natural delivery. *Technologies used: Python, various APIs.*
* **Dynamic Logbook**: Simplifies logbook creation for university modules; generates a cover, table of contents, references, and detailed weekly reflections. *Technologies used: Python, Lua, Jinja, LaTeX, Markdown.*
* **Chess Engine**: Built a chess engine from scratch to create an adaptable chess AI that learns from game history. *Technologies used: Python.*
* **QR Code Generator**: Developed to learn QR code mechanics; innovated to generate QR codes with patterns matching images. *Technologies used: Python.*
* **Note and Flashcard Generator**: Generates complete notes, flashcards, and practice questions for any mathematical topic; expanded for tutoring students. *Technologies used: Python, Jinja, LaTeX, Markdown.*
* **Digital Garden**: A platform to share notes, projects, and thoughts publicly. *Technologies used: HTML, CSS, TypeScript, Hugo, Markdown.*

## Achievements

* Awarded the [Arkwright Engineering Scholarship](https://www.arkwright.org.uk/) for demonstrating exceptional potential in engineering and technology.
* Selected for the [Turing Scheme](https://www.turing-scheme.org.uk/) to explore Thailand's culture and education system, presenting findings to peers.
* Selected for the [Balliol College Fibonacci Programme](https://www.balliol.ox.ac.uk/admissions/schools-and-outreach/access-programmes-year-12-students), a year-long academic programme designed to challenge and develop high-performing students, culminating in a residential at Oxford University.

## Skills

* Experienced with Microsoft Excel for data modelling and financial management.
* Proficient in Python with experience in Matlab, Maple, Typescript, Javascript, and Lua, currently learning C++.
* Proven ability to communicate complex information clearly and effectively.
* Demonstrated success in group projects and high-stress team environments.
* Ability to identify problems and develop effective solutions.
* Praised in word of mouth referrals for excellent customer service.
* Demonstrated time management and self-motivation supporting academic progress.

## Interests

* **Chess**: Arena FIDE Master (1623 ELO) regularly competing to practise strategic thinking.
* **Programming**: Enthusiasm for coding and software development.
* **Languages**: Learning Japanese (casual), French (B1), and German (B1).