

Alex Wendland

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PERSONAL STATEMENT

Analytical, efficient and ethical mathematician, python programmer and data scientist. Thirsty for new knowledge, experience and ideas, I push myself to learn whilst searching out places to apply myself for the largest positive impact. I am driven by problem solving, automation and the development of those around me.

EDUCATION

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| 2015 – 2020 | PhD in MATHEMATICS, University of Warwick , Coventry
“Generalisations of Groups and Cayley Graphs” under the supervision of Agelos Georgakopoulos |
| 2011 – 2015 | Masters in MATHEMATICS, University of Warwick , Coventry
1 st Class Hons (91% average) |
| 2004 – 2011 | Secondary school, Beechen Cliff School , Bath
A Levels: Further Maths (A^*), Maths (A^*), Physics (A) |

KEY SKILLS

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| Developer-level languages: | Python and L ^A T _E X |
| Working-level languages: | Java, Git, C, SQL, and JavaScript |
| Tools: | Github actions, Google suit, Docker, Kubernetes, notion and Web3. |
| Transferable: | Data analysis, visualisation, and interpretation, maths, statistics, leadership, communication, problem solving, collaboration, agile organisation, research, relationship building, and teaching. |

EMPLOYMENT HISTORY

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| 2021–CURRENT | Data Scientist – CRYPTOCOMPARE, LONDON
Data scientist, python developer, and cross-team problem solver in a Cryptocurrency data scaleup.
Product development <ul style="list-style-type: none">• Researched and presented on-chain product ideas to C-suit executives, taking into account our competitors’ offerings, customer need and product team availability.• Investigated competitor indices to develop a proprietary market ready, client-adjustable and computationally feasible consolidated orderbook index.• Produced documentation to support product handover for customers, developers and data specialists. Automated data quality and monitoring <ul style="list-style-type: none">• Collaborating with multiple product teams and the support team to improve data quality and visibility with python coded data monitoring reviewing 100GB’s of data daily.• Developed a CI/CD pipeline using docker, github actions, Azure cloud storage and kubernetes to improve transparency, maintenance and coordination of monitoring microservices.• Managed data analysts and support staff to take over maintenance and development of the data monitoring via training seminars, pair coding sessions and documentation. Partner relationship building <ul style="list-style-type: none">• Sought and built relationships with established data analytics and visualisation providers to display the quality of our data, forging a long-term, mutually-beneficial partnership.• Found new marketing opportunities with database providers for quick publicity pushes that synched up with the launch of a new product.• Cooperating with potential partners to provide key metrics for their market evaluation by providing in-depth statistics on the company’s current and future capabilities. Client delivery <ul style="list-style-type: none">• Worked with clients to research, scope out, and formalise metrics that provide them the greatest insight.• Programmed microservices that calculate metrics on TBs of data in cloud storage, delivered daily and historically.• Coordinated analyst, product and delivery teams to ensure quality-assured data deliveries to multiple clients. |
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Team leadership and management

- Created and led a data science team with a cross-company jira board, weekly reporting to the c-suit executives, quarterly retrospectives to improve efficiency and a relationship with the Chief Operations Officer.
- Run month blockchain training for 20 people and coached analysts in python at a weekly workshop.
- Interviewed and hired a PhD student intern and data analyst.
- Wrote an analysts handbook in notion for team members and set up an introductory 3-week python training on github.
- Line managing two team members with one-to-ones, formal evaluations and seeking out continuing professional development.

2020–2021

Civil Service, Science and Engineering Fast Stream – CABINET OFFICE, LONDON

The [Fast Stream](#) is a competitive leadership programme that develops individuals' communication, organisational and leadership skills.

Project management

- Project-managed high-profile technical reports with multiple stakeholders within the [Advisory Council for the Misuse of Drugs: ACMD advice on consumer cannabidiol \(CBD\) products](#) and [Consideration of barriers to research: part 1](#).
- Managed internal stakeholders by developing road maps, regular updates, and resolving different requirements, and external stakeholders by organising call for evidence sessions, evidence gathering sessions, and public correspondence.
- Organised the analysis of the departmental staff survey to derive key targets and objects, increasing inclusivity and diversity.

2011–2020

Academia – UNIVERSITY OF WARWICK

Algebraic graph theory PhD student driven by problem-solving, teaching and community building.

Research

- Built a portfolio of papers in leading journals such as [Advances in Mathematics](#), [Annals of Applied Probability](#) and the [Journal of Graph Theory](#).
- Established a strong academic record, earning the Ron Lockhart Student Prize in 2013 and undertaking 2 funded research projects during my undergraduate degree.
- Undertook a UKRI policy internship where I taught myself Natural Language Processing in python to match policy makers to academic experts using the [Centre for Science and Policy's](#) database.
- Attending multiple European Study Groups with Industry I worked with a group of mathematicians on an industrial problems such as adversarial image classification for the MOD's [Defense, Science and Technology Laboratory](#), and scheduling problems for Heathrow airport.

Communication and teaching

- Teaching all levels and formats: lecturing masters level courses to helping underprivileged A-Level students one-on-one, winning the student voted Postgraduate teaching award in 2017.
- Attended multiple conferences and spoken at many universities including: Cambridge, Iceland, Imperial College and Oxford.
- Earning funding in 2013 from [JISC](#) to develop a virtual learning platform in django (python).

Organisation and leadership

- Chairing the main student forum for change within the department for 3 years and member of multiple departmental committees and university societies, I actively organised networking events, ran extra academic sessions and rallied for change in the interest of the students. Earning the “giving to Warwick prize” in 2014.
- Representative on the diversity committee, earning the Bronze Athena Swan award in 2019 for the Maths department.
- Organising the weekly postgraduate seminar and board games night as well as additional social activities such as the infamous Christmas party I built the postgraduate community.

INTERESTS AND ACTIVITIES

I enjoy running, cycling, hiking, climbing, podcasts, board games and politics. I am actively involved in effective altruism and have given the [Pledge](#).