

Alex Wendland

✉ a.p.wendland@gmail.com | 🌐 AlexWendland | 🌐 awendland.co.uk

Experience

Engineer	Man group	07/2023 - Present
<ul style="list-style-type: none">Enabled annual database cost savings of £1M by scaling an Apache Arrow Flight server from 10 requests/day to 50 requests/second.Boosted fund chargeback by £80K/year by implementing Snowflake cost monitoring.Led a multi-team initiative to integrate LLM-powered code reviews in Bitbucket.Upgraded Python distribution for 500+ ETL pipelines with zero production downtime.Enhanced developer experience for 80+ active users with tools like mypy, pre-commit, Ruff, and Typos.		
Head of Data	CC Data	09/2021 - 06/2023
<ul style="list-style-type: none">Reduced Azure cloud storage costs by £60K/year (50%) and cut year-on-year costs by 60% through tiering policies, data format optimization, and retention strategies.Secured clients worth £60,000/year by calculating historical and daily order book metrics on over 100TB of data using NumPy, Docker, and Azure Blob Storage.Addressed customer reliability complaints by migrating data delivers to use Docker orchestrated in Kubernetes with monitoring through Loki/Grafana.Expanded product range by researching, prototyping, and developing a blockchain data product to store, analyze, and standardize on-chain data.		
Science and Engineering Fast Stream	Civil Service	10/2020 - 09/2021
<ul style="list-style-type: none">Project-managed high-profile scientific advice to the government in the Advisory Council for the Misuse of Drugs: Advice on consumer cannabidiol and Barriers to research.Connected remote civil servants using a JavaScript application backed by Google Sheets that scaled to four different societies each with up to 600 users (still used as of 2024).		
Researcher and lecturer	University of Warwick	09/2015 - 09/2020
<ul style="list-style-type: none">Won multiple Academic awards building a strong research portfolio by publishing in leading journals such as Advances in Mathematics, Annals of Applied Probability and the Journal of Graph Theory.Worked with Centre for Science and Policy (NLP), Heathrow airport and Defence Science and Technology Laboratory (AI safety).Recognized as an award-winning teacher at all levels and formats, from lecturing master's level courses to providing one-on-one support for underprivileged A-Level students.		

Education

Masters in Computer Science	4.0 GPA (current average)	2023/09 - Present
Georgia Institute of Technology, Atlanta, USA		
PhD in Mathematics	Generalisations of Cayley graphs and groups	09/2015 - 03/2020
University of Warwick, Coventry, UK		
Masters in Mathematics	1st Class Honors (91% average)	09/2011 - 07/2015
University of Warwick, Coventry, UK		

Skills

Programming Languages: Python, SQL, JavaScript, C, LaTeX

Tools and Frameworks: Pandas, Numpy, SQLAlchemy, FastAPI, Pydantic, Apache Arrow, Kubernetes, Docker, Airflow, Snowflake, Azure cloud, Dataiku, NLTK, ArcticDB, MongoDB

Collaboration and productivity: JIRA, Bitbucket, Github, Confluence, Obsidian, Neovim, Nix