

ARJUN BANERJEE

☎ +447393987483 📍 London, UK ✉ arj.banerjee@yahoo.co.uk 💻 arjunbanerjee2103 📞 arj119 🌐 arjunbanerjee.com
MEng Computing Graduate. Experienced in DevOps, Infrastructure as Code and Cloud Architecting for Data-Driven Applications.

🎓 EDUCATION

Imperial College London

Computing (Artificial Intelligence and Machine Learning) MEng

Thesis: "FedGDKD: Federated GAN-Based Data-Free Knowledge Distillation for Heterogeneous Models" 🏆

October 2018 - June 2022

First Class Honours (81.01 %)

💼 INDUSTRIAL EXPERIENCE

Palantir Technologies - Forward Deployed Engineer

September 2022 - Present

- Owning the development of a data-driven solution that has been sold to multiple customers in the healthcare sector.
- Building relationships with customers to decompose problems from various domains and communicate technical solutions.
- Improved team communication through advocacy for the effective use of project management software.
- Leveraged knowledge in: Apache Spark, Python, SQL, TypeScript, Java.

About:Energy - DevOps Engineer (Part-Time)

May 2022 - September 2022

- Headed development of the flagship data-driven SaaS product, which involved architecting the system (an ETL pipeline).
- Augmented the ability of colleague's by developing internal tooling, automation and cross-domain knowledge sharing.
- Leveraged knowledge in: AWS, Terraform for infrastructure; Bash, Docker, GitHub Actions for CI/CD; Next.js, Python, TypeScript for application code.

Microsoft: Commercial Software Engineering (Government) - Software Engineer Intern

April 2021 - September 2021

- Worked directly with customers to design and develop large-scale cloud solutions in Microsoft Azure.
- Spearheaded the architectural design of an AI-powered data enrichment pipeline for a customer project.
- Developed full stack code for various solutions: message processing, machine learning, and big data analytics.
- Contributed to open-source software to fix bugs and implement further features.
- Leveraged knowledge in: Microsoft Azure, Terraform for infrastructure; Bash, Docker, Azure Pipelines for CI/CD; .NET, C#, Python, Go for application code; Locust for load testing; Scikit-learn, PyTorch, Vaex, Dask, Pandas for machine learning.

FundApps - Software Engineer Intern

July 2020 - October 2020

- Contributed to the serverless transformation of a flagship product Rappr to improve performance and optimise costs.
- Increased transparency from zero of infrastructure costs by design and implementation of a hierarchical resource tagging system.
- Leveraged knowledge in: AWS, Terraform, Go (Terratest) for infrastructure; .NET, C# for application code.

Royal Brompton Hospital CMR Unit - Software Engineer

March 2020 - October 2020

- Developed a cross-platform data analysis tool for medical researchers which reduced user clicks by at least 90%.
- Researched the application of convolutional neural networks to optimise patient scan time for a novel technique: Diffusion Tensor Cardiac Magnetic Resonance (DT-CMR).
- Co-authored a paper that has been published to the Journal of Magnetic Resonance Imaging.
- Leveraged knowledge in: Python, PyQt5, Pandas for the data analysis tool; Python, Tensorflow, Scikit-learn for research.

⚙️ PROJECTS

VAlgoLang

Kotlin, ANTLR4, Python, Manim, Docker, React, TypeScript, Express.js, Github Actions

- Created an educational, open source programming language and compiler that produces an animation of the code execution.
- Reduced lines of code needed to produce the equivalent animation in Manim (a python library) by 95%.
- Built a web editor, VSCode language support, Homebrew formula and a Docker image for easy installation and use.

🏆 CERTIFICATIONS

Microsoft Certified: Azure Fundamentals, Azure AI Fundamentals, Azure Developer Associate

June 2021 - August 2021

Machine Learning Stanford University

March 2020

+ EXTRA-CURRICULAR

Departmental Well-being Representative

Led a team of students to monitor and improve student well-being at Imperial.