

Matthew Alexander Bieda
SRE/DevOps Engineer & Former Japanese Translator

matthewbieda.github.io

Apartment 608 Metis, 1 Scotland Street, Sheffield, S3 7AQ

matthew.bieda@gmail.com

Technical skills & Certifications

x86 Assembly, C, C++, Python (Django/Flask/FastAPI), JavaScript/TypeScript (React/Next/Node/Express), React Native, GraphQL, HTML, CSS, SQL, Relational Databases (SQLite, MySQL, Postgres), NoSQL (MongoDB), Bootstrap, Git, Cloud Computing (AWS, Azure), Docker, Ansible, Terraform, DevOps, CI/CD, Agile (Scrum)
AZ-900 (Azure Fundamentals), AZ-204 (Azure Developer Associate)

Work Experience

Insight Enterprises(EMEA): June 2022 - Current

- Worked as part of the SRE team at Insight to create several bespoke automations for a large global client leveraging ServiceNow, Ansible Tower and Microsoft Azure.
- Personally developed an internal tool for sharing sensitive data over the web based on a popular open-source project that is being leveraged to generate & send secrets for client automation requests and internal teams. I gained practical experience with container deployments on Azure and configuring Github Actions CI/CD workflows.
- Helped to create an automation script with Ansible that locates and cleans up orphaned resources within a client's public cloud tenant, saving them over €500,000 a month.
- Worked to develop a CI/CD pipeline leveraging Terraform and Github Actions for a cloud-agnostic monitoring project.
- A presentation based on our infrastructure won Best Partner Presentation at Red Hat Tech Exchange 2023 in Dublin.

The Software Institute: April - June 2022

- Received 3 months of intensive training in DevOps methodologies and tools. I learnt about the evolution of corporate IT infrastructure and the development workflows & techniques that have accompanied it.
- Also learnt about handling client interactions in a professional manner.

FCI Multiple Services (United States): December 2019 – September 2020

- Through freelance translation of financial, medical, and legal documents I obtained experience of collaborating with a project manager in order to produce results within tight deadlines.
- I broadened my language skills into specialist domains and improved my ability to produce high-quality translations by improving my vocabulary.

Coulsdon College: January - February 2013

- Invigilation of GCSE & A-Level examinations.

Personal Projects

jp-translate

A state-of-the-art open source Japanese ⇌ English machine translation system created with OpenNMT. Deployed using Docker & Streamlit. Accompanied by a research paper. My model achieved near commercial levels of translation quality with a <£100 compute budget as a sole developer.

Capstone

My blog developed with SQLite, Django, Bootstrap and Javascript. Featuring mobile-first responsive design. Deployed with PythonAnywhere.

PERN Todo

A PERN (Postgres, Express, React, Node) stack application built with a RESTful API validated using Postman.

Education

September 2020 - September 2021

Queen Mary University of London – MSc Computing and Information Systems (Distinction - 80%):

Dissertation Title: Refining the state-of-the-art in Machine Translation, optimising NMT for the JA <-> EN language pair by leveraging personal domain expertise

- **Software Engineering:** Development methodologies, OOP, systems analysis and UML (**96%**)
- **Computer Architecture & Networks:** Wide coverage of computer architecture & networking protocols (**85%**)
- **Computer Programming:** Used Python, Jupyter and Pandas to create a Covid-19 tracking dashboard (**88%**)
- **Security & Authentication:** Cryptography, encryption, hashing, digital signatures and authentication (**88%**)
- **Cloud Computing:** Deployed a web application using AWS infrastructure, Python, Flask and the TFL API. Also learnt about virtualization, containerization and linux server administration (**91%**)
- **Data Analytics:** Created a report using Python, Pandas, NumPy, Scikit-learn, Matplotlib and Scipy libraries to analyse the effect of ethnicity and social status on GCSE attainment using statistical machine learning (**82%**)
- **Database Systems:** RDBMS theory, SQL, database modelling and implementation in Oracle (**67%**)
- **Risk and Decision Making for Data Science & AI:** Bayesian networks and statistics for decision making (**98%**)

Additionally I studied algorithms, data structures and operating systems alongside my degree. I also enjoy problem solving websites such as LeetCode and Codewars.

Harvard University – CS50x Introduction to Computer Science (December 2020):

Introduction to computer architecture, data structures, algorithms, C, Python, HTML, CSS, MySQL, Bootstrap and Flask.

Harvard University – CS50's Mobile App Development with React Native (November 2021):

Javascript, React, React Native, Redux, Asynchronous Redux, Deployment, Testing and optimization.

Harvard University – CS50's Web Programming with Python and Javascript (January 2022):

Python, JavaScript, and SQL using frameworks like Django, React, and Bootstrap. Topics include database design, scalability, security, user experience and deployment.

Stanford University – CS106A Code In Place (May 2020):

Completed a 5-week introductory online Python programming course based on material from the first half of Stanford's introductory programming course, CS106A.

Final Project (Space Invaders game in Python):

<https://compedu.stanford.edu/codeinplace/public/projects/0135.html>

September 2015 – June 2019

University of Sheffield - BA Japanese Studies (2.1 Honours - 68%)

Including exchange year at Seijo University (Tokyo, Japan)

Dissertation title: Re-evaluating the role of Industrial Policy in Japan's "Economic Miracle" 1955-1973

- Developed a high level of ability in reading, writing, speaking and comprehending Japanese. Also developed a strong working knowledge of classical and literary Japanese in addition to everyday usage.
- Significant focus on translation skills, learnt how to prioritise accuracy or readability dependent on the nature of a project. Also learnt how to tailor a translation for a particular audience.
- Developed a significant interest in the causes of Japan's post-war economic growth, culminating in my independent dissertation project.
- Obtained a strong understanding of Japanese corporate governance, human resource practices and labour law.

Reigate College (A-Level) September 2009 – July 2012

English Lit - A*, Mathematics - B, Biology - B, Chemistry - C

Wallington County Grammar School (GCSE) September 2004 - July 2009

6 A*s, 3 As, 3 Bs, 1 C

Other interests and achievements

- Natural languages: English(native), Japanese(fluent)
- JLPT N1 certified (December 2019: Grammar/Vocab: 38/60 Listening: 40/60 July 2019: Reading 24/60)
- 3D Graphics Programming and modelling (Blender)
- I am a proficient self-taught guitarist
- I am a qualified PADI Advanced Open Water Diver