Peter Gillingham

Email	petergillingham80@gmail.com
Phone	07383 014163
LinkedIn	www.linkedin.com/in/peter-gillingham

Personal Statement

I am a software developer, with a broad skillset including full stack web development, data science and analysis with Python and MATLAB, and embedded systems engineering with C and C++. I graduated from the University of York, awarded an Upper Second Class Honours for an Integrated Masters in Electronic Engineering with Music Technology Systems. In my career so far I have successfully integrated myself into a fast paced environment, working with many technologies across multiple areas of software engineering, including frontend and backend web development, implementation of AI solutions and development of mathematical models in software.

Education

Integrated Master's in Electronic Engineering with Music Systems Technology
September 2019–June 2023
University of York

This course has taught me and improved my knowledge in many areas, including electronics, software development, hardware implementation, embedded system design, networking, digital signal processing and data analysis.

A Levels - Computer Science, Mathematics and History
September 2017–June 2019
Moulsham High School

9 GCSEs including English and Mathematics
September 2012–June 2017
Moulsham High School

Work Experience

Graduate Software Developer
August 2023–Present
Premium Lithium

I have worked across many disciplines in this role, from developing customer facing web applications to internal operations support software to AI applications in energy prediction. It is a fast paced start up requiring me to manage my time effectively and work as part of an agile team.

Production Operator

October 2021–August 2023

DJ Assembly

> I have worked in all areas of production and manufacturing of electronic goods, including circuit assembly, box build, and inspection, testing and validation. I also gained experience in managing outgoing and internal stock and logistics.

Customer Assistant

June 2018–August 2020

Matalan

> I worked in all areas of the store, with responsibilities including serving customers at the tills, management and selection of stock on the shop floor, and inventory management in the warehouse.

Technical skills

Programming Languages Python, JavaScript (SvelteKit and React) Java/Maven, C/C++, MATLAB, Swift, VHDL, ARM Assembly Language, LaTeXand SQL

Technologies Git, VSCode, Microsoft Office, Linux, MacOS, Vivado Design Suite, Eclipse, Keil μVision 5, Supabase

Software Engineering Object Oriented Programming, Agile Methodology, Algorithm Design, Digital Signal Processing, Technical Writing, Database Design and Management

Electronic Engineering Circuit Design and Analysis, Hardware and Software Integration, Embedded System Design and Development

Achievements

- Undertook the development of an algorithm for a home battery storage and management system for my masters project, which led me to use genetic programming and implement the NSGA-II algorithm in Python, and data science techniques for the prediction of future energy use of a household, implemented in MATLAB, managing large datasets for both.

- Successfully managed and worked in a team to develop an interactive presentation system, complete with image, audio, video and text display and Python and JavaScript scripting capabilities, implemented in Java.

- Designed and developed elements of an operating system for an embedded ARM microcontroller, with a fixed priority scheduler, mutual exclusion, task waiting and a queue-based task communication system, implemented in C, with the ARM Assembly Language.

- Created a model of the human voice and a guitar through the use of physical modelling synthesis, implemented in MATLAB.

Interests

I have played guitar for over a decade, drums for four years, and have taken on the role of lead guitarist and audio engineer for my band, resulting in us releasing an album and playing multiple shows in York. I am also a keen and regular climber, both in climbing gyms and outdoors, and I also enjoy cycling in and around York.