

# Tausif Samad

[ts.tausifsamad@gmail.com](mailto:ts.tausifsamad@gmail.com) | [linkedin.com/in/tausif-samad/](https://linkedin.com/in/tausif-samad/) | [github.com/Bitmapp3r](https://github.com/Bitmapp3r) | [tausifsamad.com](https://tausifsamad.com)

## EDUCATION

<b>Imperial College London</b> <i>Computing (MEng)</i>	London, United Kingdom <i>Sep 2023 – Jun 2027</i>
<b>St. Olave's Grammar School</b> <i>A-Levels: A*A*A*A* in Computer Science, Mathematics, Further Mathematics and Physics</i> <i>GCSEs: 6 Grade 9s (inc. Mathematics), 1 Grade 8, 3 Grade 7s (inc. English Lang. and Lit.)</i>	Orpington, United Kingdom <i>Sep 2020 – Jun 2022</i> <i>Sep 2015 – Jun 2020</i>

## EXPERIENCE

<b>Full-Stack App Developer   My Salah Mat</b>	Jun 2025 – Present
<ul style="list-style-type: none"><li>Developing a cross-platform mobile app that will be pitched to investors using Flutter for the frontend and Firebase for the backend</li><li>Responsible for deciding the application architecture and technology stack</li><li>Implementing a feature to allow users to save posts in a chronological structure</li></ul>	

## PROJECTS

<b>QuickMed   Flutter, Dart</b>	Jul 2025
<ul style="list-style-type: none"><li>As part of a hackathon, developed a medical mobile app to allow patients to quickly transfer data to and from an NFC tag and a phone; designed with humanitarian crises in mind</li><li>Implemented loading and storing of medical JSON data</li></ul>	
<b>Readventure   NextJS, React, TypeScript, TailwindCSS, Firebase, GitLab CI/CD</b>	May 2025 – Jun 2025
<ul style="list-style-type: none"><li>Created a webapp to improve children's interest in reading by providing stories with choices that affect the narrative and ending</li><li>Slashed user story searching time by up to ~75% through the implementation of a multi-genre filtering system</li></ul>	
<b>WACC Compiler   Scala, Parsley, x86-64 Assembly, GitLab CI/CD</b>	Jan 2025 – Mar 2025
<ul style="list-style-type: none"><li>Implemented a compiler for the WACC programming language which involved lexical, syntactic, and semantic analysis, along with x86-64 code generation</li><li>Extended the compiler by implementing peephole optimisations to the generated assembly code</li></ul>	
<b>PintOS Operating System   C, GDB</b>	Oct 2025 – Dec 2025
<ul style="list-style-type: none"><li>Implemented core operating system functionality and features to the 'PintOS' operating system such as CPU scheduling, threading, support for user programs, and memory management</li><li>Improved fairness and responsiveness of thread scheduling by implementing an advanced BSD scheduler which integrated dynamic priority adjustment of threads using recent CPU usage, 'nice' values, and load average tracking; validated performance with tests across CPU-bound and I/O-bound workloads</li></ul>	
<b>Aarch64 ARMv8 Emulator, Assembler and Wireless Morse Code Device   C</b>	Jan 2025 – Mar 2025
<ul style="list-style-type: none"><li>Developed an emulator and assembler for the Aarch64 mode of the ARMv8 ISA that was then used to create an assembly program to flash an LED connected to a Raspberry Pi's GPIO pins</li><li>Created a wireless Morse code device using the Raspberry Pi's GPIO pins that can send and receive messages wirelessly to and from another device</li></ul>	

## TECHNICAL SKILLS

**Languages:** Java, Python, C/C++, SQL, JavaScript, TypeScript, HTML/CSS, Scala, Dart, Haskell, Assembly (x86-64, ARMv8)  
**Frameworks/Libraries:** Nextjs, React, Flutter, Parsley, Matplotlib  
**Developer Tools:** Git, Firebase, VS Code, Visual Studio, PyCharm, IntelliJ, Android Studio  
**Operating Systems:** Linux, Windows

## OTHER EXPERIENCE

<b>GCSE Online Maths Tutor   Explore Learning</b>	Sept 2023 – Dec 2023
<ul style="list-style-type: none"><li>Tutored students to help them strengthen their GCSE Mathematics skills and improve their weaknesses</li></ul>	
<b>Volunteer Teacher Assistant   Life Changing Tuition</b>	July 2022 – Aug 2022
<ul style="list-style-type: none"><li>Volunteered at 'Life Changing Tuition' to help primary school students prepare for 11+ exams</li><li>Helped mark exam papers, set up the venue, and also worked alongside Teachers to help students' confusion over certain topics</li></ul>	
<b>GCSE and A-Level Mathematics, Science and Computer Science Tutor   Self-Employed</b>	July 2022 – Aug 2022
<ul style="list-style-type: none"><li>Helped students in the range of year 7 and Sixth Form to tackle their weaknesses in the Sciences and Mathematics, assisting them in preparing for their GCSE and A-Level exams</li></ul>	