

# Preetham Ananthkumar

preetham.mervin@gmail.com | +44 7913630398

Github: iArcanic | LinkedIn: preetham-a-1810781b1 | iarcanic.github.io

---

## Education

**BSc Cybersecurity – University of Warwick | Coventry, UK | Sept. 2022 – Present**

- Relevant modules: Software Development and Security, Network Communications, Cyber Defence, Penetration Testing, Operating Systems for Cyber Security, Cyber Systems Architecture and Organisation, Cyber Context of Software Engineering, Programming Languages for Cyber Security
- Predicted 1st class overall
- Participated in university Capture the Flag (CTF) competitions

**A-Levels – Watford Grammar School for Boys | Watford, UK | Sept. 2020 – Jun. 2022**

- Mathematics: A, Computer Science: A\*, Physics: B
- Participated in the Computing Olympiad

**GCSEs – The John Lyon School | Harrow, UK | Sept. 2015 – Mar. 2020**

- 4 Grade 9s, 4 Grade 7s, 1 Grade 6, including Mathematics and English
- 

## Current & previous work experience

**Creative Coding Teacher – BlueShift Education | Part-time | London, UK | Apr. 2024 – Sept. 2024**

- Worked alongside other teachers to provide engaging coding lessons for students ages 8-14
- Delivered a curriculum that involved topics ranging from Python to AI and machine learning
- Simplified complex coding concepts and fostered problem-solving skills in a fun yet educational manner
- Provided individualised assistance to students based on a variety of learning styles

**Technology Intern – Sky UK | Full-time | Osterley, UK | Jun. 2023 – Jun. 2023**

- Gained more exposure to penetration testing using Kali Linux and VulnHub
  - Explored digital forensics using FTK and collaborated with ex-police forensic experts
  - Learnt more about mobile app security and architecture with NOW developers
  - Built connections with professionals in mobile app development, cyber security, and forensics
- 

## Projects

**Penetration testing and security tools**

**Cyber Homelab | Sept. 2024 – Present**

- Set up a penetration testing homelab within my personal server blade to serve as a practice environment

**Rust Network Packet Analyser | Jul. 2024 – Aug. 2024**

- Built a tool to analyse network traffic and detect any anomalies

**Tor-Based HTTP, FTP, and Telnet Honeypots | Mar. 2024 – Apr. 2024**

- Developed a honeypot application mimicking HTTP, FTP, and Telnet services hosted on the Tor network to analyse attacker interactions on the dark web

## **Network Architecture POC | Jul. 2023 – Aug. 2023**

- Created a network technical implementation for a mock charity organisation, involving subnetting, IP address re-organising, NAT, and firewalls, all emulated using Netkit-JH

## **Penetration Testing Mock Linux Servers | Jan. 2023 – Apr. 2023**

- Used Nmap, Hydra, and privilege escalation methods to conduct a full penetration test, producing a report

## **Reverse Engineering on Assembly Language Level | Nov. 2022 – Feb. 2023**

- Conducted low-level penetration tests on assembly programs via GDB

## **AI and machine learning**

### **Cat and Dog Neural Network Image Classifier | Sept. 2024 – Sept. 2024**

- Built a CNN algorithm using TensorFlow to sort out images of cats and dogs

### **KNN Book Recommendation Engine | Sept. 2024 – Sept. 2024**

- Designed a book recommendation using the KNN algorithm

### **Neural Network SMS Text Classifier | Sept. 2024 – Sept. 2024**

- Created and trained an AI model to classify SMS messages as spam or ham

### **Synthetic AI Phishing Email Generator | Jun. 2024 – Jun. 2024**

- Trained an AI-model custom dataset to serve as a phishing attack simulator proof of concept

## **Software development, cloud, DevOps, and web security**

### **ASP.NET Core C# Full Stack Web Application | May 2024 – May 2024**

- Built a secure full-stack app with CI/CD (including SAST and DAST scans) hosted on Google Cloud

### **CI/CD Pipeline Development on AWS Resources | Jan. 2023 – Apr. 2023**

- Secured a JS app against SQL injection and hosted on AWS with Docker

---

## **Certifications**

### **Preparing for CompTIA Security + | Sept. 2024 – Present**

### **Preparing for Offensive Security Certified Professional (OSCP) | Sept. 2024 – Present**

### **Blue Team Junior Analyst | Security Blue Team | Sep. 2024 – Sep. 2024**

### **Foundation Level Threat Intelligence Analyst | arcX | Sep. 2024 – Sep. 2024**

### **Machine Learning with Python | FreeCodeCamp | Sep. 2024 – Sep. 2024**

### **Foundational C# | Microsoft | Jul. 2024 – Jul. 2024**

### **Information Security | FreeCodeCamp | Jul. 2024 – Jul. 2024**