Michael Parker

(+44) 7818-132-053   michaelrbparker@gmail.com   http://www.michaelrbparker.com

About Me

Passionate and driven Computer Science student with 10 years of experience in software development, open-source contributions, and problem-solving. Strong background in Python, web development, and AI applications.

Education

University of Portsmouth, Portsmouth, England *MEng Computer Science* (2024 – 2029, expected)
Student Representative for Computer Science (2024 – Present)
Beacon Academy, Crowborough, England A-Levels: Mathematics, Physics, Computer Science, and Extended Project Qualification (EPQ) (2022 – 2024)
Dubai British School GCSE / BTECs: GCSE Maths, English, Science, Media, History, BTEC Business, BTEC Computing and IT (2020 – 2022)

Projects

- **Simplex Discord Bot** (2021 – Present): A feature-rich, open-source Discord bot built in Python using Py-Cord and SQLite. Actively maintained, supporting over 670 servers and 87,000 users.
  Technologies: Python, Py-Cord, SQL

- **Internet-Controlled Christmas Tree** (2021): Developed a system using a Raspberry Pi and Discord bot to remotely control a Christmas tree's LED colors and patterns via Discord.
  Technologies: Python, Raspberry Pi 3B+

- **Chef AI** (2023): Created an app for managing virtual fridges and generating personalized recipes based on ingredient availability and expiration dates to reduce food waste.
  Technologies: Dart, Flutter, SQLite

- **Spoon Finder** (2022): Developed a navigation app to help users locate the nearest Wetherspoons using distance metrics and a compass interface.
  Technologies: React Native

- **Simplistic Weather App** (2022): Designed a minimalistic weather forecasting app leveraging the OpenWeather API.
  Technologies: Dart, Flutter

- **Modrinth Plugins and Mods** (Ongoing): Developed server utility plugins and mods focusing on quality-of-life improvements, achieving over 1,000 downloads with positive feedback.
  Technologies: Java

- **Spotify Word Clouds** (2023 – Present): Created a web app to transform Spotify listening history into word cloud posters showcasing favorite artists and tracks.
  Technologies: Python, Flask

- **Python Fill-in-the-Blanks Tool** (2023): Developed a tool for CS educators to generate "fill-in-the-blank" exercises from Python code by removing comments, docstrings, and specific keywords.
  Technologies: Python

Awards and Competitions

- **Pearson's Silver Award**: BTEC Silver Award for IT and Computing (2022)

- **UKIEPC**: Competed in the UK and Ireland Programming Contest as part of a University of Portsmouth team (2024)

- **UK Mathematics Challenge**: Entered the UK Mathematics Challenge twice. National-level competition participant (2023, 2024)

- **Google Gemini Developer Competition**: Developed an AI chef app to create custom recipes and reduce food waste (2024)

- **Kalebr Happy Plants AI**: Designed AI-based plant care solutions using a Raspberry Pi (2016)

Publications

- **How I Made a Basic Trading Bot for Stock and Crypto** (2025): Developed a trading bot using Python to automate stock and cryptocurrency trading.
  Link: https://blog.michaelrbparker.com/post/9

- **Using ML and AI for Stock Price Prediction** (2025): Applied machine learning models to predict stock market trends.
  Link: https://blog.michaelrbparker.com/post/8

- **My Journey in Open-Source Development** (2024): Reflections on building and maintaining Simplex, an open-source Discord bot.
  Link: https://blog.michaelrbparker.com/post/3

Skills

Programming Languages: Python, SQL, Flask, Dart
Web Development: HTML, CSS, Flask, Flutter
Operating Systems: Linux (Debian, Ubuntu, Fedora), Windows, Windows Server
Mathematics: Basic mathematics and applied mathematics
Physics: Fundamental principles of mechanics and A-Level physics
Communication: Fluent in British English, verbal and written
Teamwork: Collaborative problem-solving in academic and professional settings
Microsoft Azure: Experienced with AZ-900 and AI-900 certifications
RDBMS: Proficient in using Relational Database Management Systems
Docker: Proficient skills with Docker for application deployment

Work Experience

Computer Science and Maths Tutor, Private (2023 – Present)
Provided one-on-one tutoring for GCSE and A-Level students, improving their understanding of core concepts and problem-solving skills. Tailored lesson plans to individual learning styles, leading to increased confidence and improved exam performance.
Facilities, Maintenance, and Lettings Assistant, Beacon Academy, Crowborough, England (2023 – Present)
Provided support for maintaining school facilities, coordinating event lettings, and ensuring a safe, functional environment.
Volunteer Reading Intervention, Ashdown Primary School, Crowborough, England (2022 – 2023)
Supported students with reading challenges, fostering improved literacy skills and confidence through one-on-one and group sessions.

Experiences

Secretary of the IT Society, University of Portsmouth (2024 – Present)
Organised and managed society events, including coding workshops, hackathons, and networking sessions. Acted as a liaison between society members and university staff, ensuring smooth communication and effective event planning. Developed the society's online presence, increasing member engagement.