

Abhay Mundhara

+44 7831278304 abhay.mundhara@gmail.com <https://github.com/abhaymundhara> /in/abhay-mundhara-b86aa8262/

PROFILE

Full-stack software engineer with hands-on experience in test automation, AI/ML development, and cloud infrastructure. Proficient in CI/CD pipelines, containerization, and infrastructure as code. Skilled in building scalable, automated solutions with focus on performance and user experience. Passionate about AI assistants, workflow automation, and developer tools.

TECHNICAL SKILLS

- **Languages:** Python, Java, JavaScript, C++, Swift, HTML, CSS, Rust, Tauri, Electron, React, TypeScript
- **Core CS:** Data structures & algorithms, operating systems, database systems, computer networks, software engineering, web development, object-oriented programming, system architecture, distributed systems, complexity analysis, debugging, testing, code reviews
- **Frameworks/Tools:** Git, GitHub, GitLab, CI/CD (GitHub Actions / GitLab CI), Docker, Kubernetes, REST APIs, Selenium, Robot Framework, Postman, Git, JIRA, Confluence
- **Practices:** Agile/Scrum, monitoring/observability basics, performance optimization, accessibility, inclusive teamwork & mentoring
- **ML/AI Specialization:** NLP, Deep Learning, LLM Integration, Computer Vision, Benchmarking

PROFESSIONAL EXPERIENCE

BT Group PLC, Belfast (Hybrid)

Software Development Engineer in Test | Sep 2023 – Jul 2024

- Built and migrated 50+ automated test scripts, improving test reliability and execution speed.
- Contributed to framework modernization by migrating scripts from legacy to new systems and accelerating test development by 10 test cases per week
- Spearheaded an initiative to identify and resolve the three biggest bottleneck areas within the QA process based on root cause analysis, which streamlined testing workflows and boosted code coverage by 7%.

Stoneage General Trading LLC, Dubai

Assistant Developer (Vocational Training) | Jun 2022 – Sep 2022

- Developed a full-stack client website, ensuring requirements were met through iterative updates.
- Improved communication and client satisfaction by delivering progress demos regularly.

PROJECTS

ChatDock (Electron, React, TypeScript, Ollama) | <https://github.com/abhaymundhara/ChatDock>

Cross-platform desktop app integrating local-first AI assistants.

Designed a modern floating bar UI with React and Tailwind, supporting plugin-like modularity.

Termi (Rust, Python, Tauri) | <https://github.com/abhaymundhara/Termi>

- A terminal-based productivity assistant that understands natural language.

Provides quick commands, reminders, and workflow automation directly from the command line.

WhatsApp Clone (Swift, WebRTC, SwiftUI) | https://github.com/abhaymundhara/Messaging_App

- iOS messaging app supporting text, audio, and video messages.

- Implementing end-to-end encryption and real-time voice/video calls.

Car Rental Management (HTML, CSS, JS) | <https://github.com/abhaymundhara/Garage>

- Built an admin dashboard to manage rentals, billing, and fines.

- Automated invoice generation, reducing manual calculation effort.

Web Browser Automation Agent (Python, Puppeteer) | <https://github.com/abhaymundhara/SAM>

- Built an AI-powered browser automation agent capable of booking hotels and flights.

- Designed flows to interact with Booking.com handling dynamic UI and captchas.

- Integrated local LLM (Gemma 2) to generate navigation instructions dynamically.

EDUCATION

Queen's University Belfast

Belfast, UK | Sep 2022 – May 2026

MEng Computer Science (Second Class Upper, 68% ; Predicted 1st)

Leadership Experience

Queen's University Belfast

Belfast, UK | Sep 2024 – Present

Demonstrator

- Mentored students one-to-one on debugging strategies, programming fundamentals (incl. data structures & algorithms), and lab workflows; collaborated with faculty to improve teaching practices