Tadgh Purcell

📍 Barcelona, Spain ✉ tadghp@gmail.com 📱 +(353) 086 2387510 🔗 in/tadghp ☁ tadghpurcell.netlify.app/

EXPERIENCE

Data Support Engineer | bsport | Barcelona, Spain | November 2024 - Present
- Managed the ETL Process by overseeing the end-to-end ETL process for migrating new customers' data.
- Built and maintained web scrapers to extract data from APIs and websites.
- Improved Python scripts and automated repetitive tasks in data pipelines to enhance performance.
- Performed data quality checks and validation to maintain the accuracy and consistency of migrated data.

Research Assitant | University College Dublin | Dublin, Ireland | August 2024 - January 2025
- Selected as one of two students to develop the Bikehood project, a digital twin platform using Golang, React, and Unity, aimed at improving traffic flow in Dublin.
- Built a database and web scrapers to collect real-time and historical data on cycling, pedestrian, and transport infrastructure to feed into the digital twin.
- Created an interactive web app to showcase the digital twin, enabling stakeholders to better understand and make informed decisions for urban development projects.

International Assignment Associate | Graebel Relocation | Prague, Czech Republic | July 2021 - April 2022
- Processed allowances, payments, and costs efficiently, ensuring accurate financial management for transferees.
- Verified transferee's services and expenses complied with the Client's policy, maintaining strict adherence to established guidelines.
- Maintained organized files, ensuring reliable tracking and reporting for sustained data quality and facilitating smooth audits and reviews.

Private Soldier | Irish Defence Forces | Dublin, Ireland | August 2015 - September 2017
- Provided aid to the Civil Power, supporting local authorities in maintaining public order and safety during critical situations.
- Engaged in ceremonial duties at both local and national events, representing the armed forces with professionalism and precision.
- Pursued ongoing training to enhance skills and proficiency with new equipment, adapting to a dynamic environment and staying current with military advancements.

PROJECTS

Anseo | github.com/TadghPurcell/Anseo
- Collaborated in a team of six to develop an application helping entrepreneurs select optimal New York neighbourhoods for their business.
- Utilised a tech stack including React, Tailwind CSS, Java Spring Boot, Python, Docker, and AWS for development and deployment.
- Developed a website with an interactive Mapbox map integrating footfall, earnings, and crime data to help entrepreneurs identify optimal New York business neighbourhoods.

On Your Bike | github.com/TadghPurcell/On-Your-Bike
- Collaborated with a team of three to develop a web application for Dublin Bikes users, featuring an interactive map using the Google Maps API and a built-in route planner.
- Scraped data from open-source APIs using Python scripts to train a machine learning model for predicting real-time bike station occupancy.
- Designed the front end of the application, building the interactive map and search engine features, and deployed the application on AWS.

NASA Hackathon Challenge | github.com/TadghPurcell/nasa-hackathon-2024 | October 2024 - October 2024
- Developed a web-based application to compare ground-based observations with Landsat data.
- Implemented a feature allowing users to define a target location for satellite observation.
- Designed a notification system to alert users when Landsat passes over their selected location.
- Integrated Landsat Surface Reflectance (SR) data for retrieval and display.
- Worked in a team-based hackathon setting, applying geospatial data processing and web development skills.

EDUCATION

MSc in Computer Science | University College Dublin
Dublin, Ireland | 2024
- Modules include: Python, Java, Ruby, Software Engineering, Object Oriented Programming, Web App Development, Network & Information Systems, Cloud Computing, Big Data Programming, Distributed Systems, Data Structures & Algorithms

BA (Hons) in International Business | Waterford Institute of Technology
Waterford, Ireland | 2021
- Modules included: Business Strategy, International Corporate Strategy, Organisational Behaviour, Introduction to Statistics, Business and Financial Maths, IT & Communication Skills

SKILLS
- **Languages:** JavaScript, Java, Python, HTML5, CSS, SQL, TypeScript
- **Technologies/Frameworks:** AWS, ReactJS, Spring Boot, NodeJS, Docker, FastAPI, Flask, Go, TailwindCSS
- **Developer Tools:** Git, Vitest, Pytest,

- **Databases:** Postgres, MySQL, MongoDB