

# Tadgh Wagstaff

tadgh@tadghwagstaff.com | /in/tadgh-wagstaff/ | github.com/TadghW | +353877888673

## About Me

---

I'm a software engineer and project manager with four years of experience working in a wide range of environments and industries. I'm an expert at negotiating the technical and timeline requirements of complex projects and facilitating effective communication between stakeholders.

## Experience

---

**Project Manager, Tailorhound** – Galway, Ireland May 2024 – Present

- Managed primary project's transition from proof of concept to in-trial software instigating improved security and code quality maintenance practices and introducing agile practices to speed up development and enable timeline estimation and tracking
- Assisted founders in assessing key metrics required from trial, adopting a system of KPIs, and developing a pitch deck based on KPI progress
- Liaised between technical and non-technical personnel, saving 12 hours a week otherwise spent in meetings

**Software Engineer, Valeo R&D** – Tuam, Ireland May 2023 – May 2024

- Designed and developed **JavaScript** driven web app to visualise real-time information from key data pipelines
- Collaborated in refactoring of **SQL schema** and **Java/Spring REST API** endpoints to improve time efficiency of data retrieval by 92%
- Developed **predictive algorithm** to derive batch life-cycle timelines and loss rates from recovered data, integrated application with planning software, enabling users to update tickets from within the application
- Managed internal documentation efforts, creation and deployment of internal web services

**Software Engineer, Tailorhound** – Galway, Ireland Jan 2023 – Jun 2023

- Developed and tested POC computer vision algorithm to derive the circumference of subjects' waist and hips with 94% accuracy from a single picture using **Python Image Library (PIL)**, **Numpy**, **Pandas**, and **Torchvision**
- Designed and developed validation algorithm to assess subjects' poses for creation of a **training/validation** dataset for their **machine learning model**
- Created, configured and managed **Compute Engine** instances as development and **production environments**
- Deployed inference model and **RESTful API** written in **FastAPI** to Compute Engine instances with domain validated **SSL certificates** for access from **HTTPS environments**
- Assisted business owners with key decision making, networking, recruiting, and pitch-deck creation

**Software Engineer, Headphones.com** – Vancouver, Canada Mar 2022 – Nov 2022

- Developed web app for storing, visualising, and transforming frequency/magnitude data from electro-acoustic transducers with a range of transfer functions using **JavaScript**, **Firestore**, and **D3.js**
- Lead development of software for semi-automated transducer testing station designed to increase accuracy, repeatability and efficiency of transducer measurements using **C#**, **ActiveX**, and **Virtins Multi-Instrument Analyser**
- Worked closely with hardware development to validate the function of novel test platforms with software tools
- Contributed to the development of the new headphones.com e-commerce platform with **HTML/CSS** and **JavaScript**

## Education

---

**Univeristy of Galway** – HDiP in Software Design and Development 2022  
**National Univeristy of Ireland, Galway** – MA in Digital Humanities 2019  
**National University of Ireland, Galway** – Joint Honours BA in History and English Literature 2018

## Projects

---

**PprRank**: MongoDB and Java WebSocket REST API for my personal utility website [headphones.science](https://headphones.science)  
**TCP/IP Manipulation**: Example of multi-platform TCP/IP packet manipulation with libpnet in Rust  
**HTTP Stress Test** Highly concurrent HTTP request stress test with logging written in Rust with Tauri, Tokio and Request  
**Compute Engine Snapshot Manager**: Python scripts for managing GCP Compute Engine disk snapshots

## Skills

---

**Programming Languages**: Python, JavaScript, C#, Java, Rust, Go, JSON, HTML/CSS, LaTeX  
**Fields**: REST APIs, TCP/IP, Cybersecurity, Data Analysis, Scientific Metrology, Computer Vision, Cloud Management  
**Soft Skills**: Effective communication, pro-active problem solving, project management, conflict resolution