# JORDAN WILLIAMS

Senior Software Engineer

MEng Acoustical Engineering Audio Research Engineer

ABN: 81 347 259 010



## **DRIVE & MOTIVATION**

I have a passion for hearing/digital health and professional audio.

My main aim is to use my formal knowledge of acoustics, audio and engineering in ways that benefit and improve people's lives.

#### Main Languages (non-exhaustive)

- Fluent/Advanced: Python, TypeScript, MATLAB.
- Working Understanding: C++, Haskell
- Capable of rapidly adapting to other languages, frameworks and tech-stacks.

#### Concepts

 IaC (terraform), SDLC & CICD, DevOps, Scrum/Kanban, Serverless Event Driven Systems, microservices, data-science, data analytics, machine learning, GenAI, LLMs.

#### Tooling/Frameworks

- poetry, fastAPI, Flask, React, MERN.
- TensorFlow, sci-kit, pandas.
- MongoDB, PostgreSQL.
- GitHib/GitLab, JIRA, Asana.
- AutoCAD, Odeon, SoundDesign, COMSOL.

#### Cloud Infrastructure

- AWS: Lambdas, ECS, EC2, RDS, CloudWatch.
- Experienced in managing tech stacks using Terraform within the AWS ecosystem. Services above are most familiar.
- Research based product development.
- Presentation & communication.
- Flexible in approach and methodology.
- High integrity, honesty, socially responsible.

# **CONTACT DETAILS**

- +61403765534 🚩 j<u>ordy\_williams@hotmail.co.uk</u>
- in <a href="https://www.linkedin.com/in/jordyjwilliams/">https://www.linkedin.com/in/jordyjwilliams/</a>
- <u>http://github.com/jordyjwilliams/</u>
- https://jordyjwilliams.github.io/

#### **EXPERIENCE**

#### daisee, Melbourne, AU

SENIOR SOFTWARE ENGINEER - SEPT 2024 - CURRENT

AUDIO ENGINEER - MAR 2023 - SEPT 2024

- Helped streamline client onboarding and ingestion. Key focus: scalability.
- Implemented a new type of scorecard questions using LLMs.
- Wrote tooling enabling internal stakeholders to self-serve. Toil reduction: 60%.
- Implemented telemetry, observability and CICD in legacy projects.
- Reduced tech-debt (by ~40%) and planned work packages to implement a standard ingestion pipeline is highly scalable.
- Championed: code quality, unit testing and a cultural shift within the team.
- Key skills: Software design (Event Driven Systems), Python, AWS, IaC (Terraform),

#### Coder Academy, Remote, Melbourne, AU

ACADEMIC MENTOR FULL-STACK WEB DEV BOOTCAMP - OCT 2022 - MAR 2023

- Managed lessons and provided support to ~30-40 students.
- Answered questions and provided asynchronous "office-hours" support across 3-4 simultaneous cohorts (up to 90 students per cohort).
- Created and uploaded: notes/recordings for 10+ hours of meetings per week.
- Key skills: education, teaching, mentoring, curriculum design, HTML5/CSS3, Python (Flask), JavaScript (React, MERN, node), MongoDB, PostgreSQL.

#### Mimi Hearing Technologies, Berlin, DE

AUDIO RESEARCH ENGINEER - OCT 2018 - FEB 2021: 2 YEARS 5 MONTHS

- Ownership, development and release planning for >5 software projects:
  - Medically certified products: hearing testing engines, analysis and result computation packages/backend services.
  - o Internal research (Python) packages for research teams (MIR, ML models).
- Main focus areas: Music Information Retrieval (MIR), Speech Intelligibility, Subjective Preference studies.
- Setup a better pipeline for, and improved QA for audio output.
- Drastically improved research team code-quality practices within research teams.
- Facilitated communication between: 4 drastically different internal teams.
- Bridge between Research and Product teams. Advanced the state of (ML) models.
- Key skills: Python, C++, data-science/analytics, machine learning, audio engineering.
- Freelanced for Mimi after my full-time period was over (whilst moving to Australia),

#### <u>Internships</u>

VARIOUS ROLES, MULTIPLE TIME-FRAMES

- Completed internships at more than <u>10 different companies</u> spanning 4 countries.
- Examples: Fotech Soltions, Sky, Shure, AECOM, Cole Jarman, JackFM.

## **EDUCATION**

#### University of Southampton, UK

MASTERS OF ACOUSTICAL ENGINEERING (MENG) - FIRST CLASS HONOURS SEPT 2014 - JUN 2018: 3 YEARS 10 MONTHS

- Graduated Valedictorian/best in final year.
- <u>Dissertation</u> won the "Institution Best Project Certificate" from the Institute of Mechanical Engineers.
  - "Signal Processing of acoustic emissions to identify Osteoarthritis in the knee joint". Machine learning model created had a blind trial success rate of 100%.
- Wakeboarding club president, student ambassador work and other responsibilities.

# **VOLUNTEERING**

# Music in Exile, Welcome Merchant, Reaching Out In The Inner West VARIOUS ROLES: MAR 2023 - CURRENT

- Regularly volunteer for a lot of differing community and music based organizations.
- <u>Reaching out in the Inner West</u>: Volunteer weekly supplying food, bedding, clothing etc to ~500+ in need individuals.
- <u>Music in Exile</u>: Volunteer at various events for a not for profit record label. Working with artists from culturally and linguistically diverse backgrounds.

#### ReDI School of Design Interaction, Berlin, DE

TEACHER, INTRO TO PYTHON, JUL 2020 - FEB 2021: 7 MONTHS

- Taught and coordinated the "Intro to Python Course", 4 hours of lessons per week.
- ReDI is a not-for-profit technology school teaching free courses to >6000 students.
  - Diverse students >95 nationalities, primarily with forced migration backgrounds

# <u>Divers Den</u>, <u>Frankland Islands</u> & <u>Reef Restoration Foundation</u>, <u>Cairns</u>, <u>AU</u> DIVEMASTER AND INSTRUCTOR TRAINING, JAN 2022 - JUN 2022: 7 MONTHS

- PADI Divemaster and Open Water SCUBA Instructor Training.
- Led and guided: ~30+ snorkelers, 4+ divers and ~30+ island nature walks.
- Volunteer dives <u>coral tree out-planting</u> with <u>Reef Restoration Foundation</u>.

## <u>Action on Hearing Loss/RIND/Sign Language Society, UK</u>