# **ELIS WILSON**

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LinkedIn ♦ GitHub

#### **EDUCATION**

# University of Warwick, MSc Statistics

October 2023 - September 2024

Medical statistics, including clinical trials, survival analysis and meta-analysis, design and analysis of experiments, statistical genetics, Monte Carlo methods, supervised learning methods, multivariate statistics.

**University of Exeter**, BSc. Mathematics (Hons), Upper Second Class September 2020 - June 2023 Modules covering Bayesian and frequentest inference, statistical modelling, statistical computing, linear algebra, differential equations and mathematical modelling.

## **KEY SKILLS**

Proficiency in data analysis and related software including R, SQL and Python, statistical modelling and analysis, data visualisation including Tableau and PowerBI, report writing, problem solving, teamwork, project-based working.

#### RESEARCH EXPERIENCE

## **Investigation into student engagement**, University of Warwick

January 2024 - present

- Co-created a project investigating post-COVID student engagement with Dr Martyn Parker (Department
  of Statistics, University of Warwick) which was driven by my voluntary work with the student-staff liaison
  committee.
  - Conducted literature and database review of current research on student attendance post-COVID.
  - Co-authored ethics committee application to cover the outreach conducted through the project.
  - Engaged with diverse group of stakeholders including senior leaders to shape department policy going forward.
  - Undertaken additional training in ethical research.
  - Underwent training in equality and diversity to ensure research engaged all members of student community.

# Methods for graph comparison, University of Exeter

March - April 2023

- Submitted paper on methods for comparing labelled directed graphs with applications to research description frameworks and the Semantic Web.
  - Literature review outlining modern developments in the Semantic Web and resource description frameworks.
  - Researched, implemented and evaluated established techniques for graph comparisons.
  - Developed, implemented and evaluated original techniques for graph comparisons.

## Modelling the QBO, University of Exeter

September - December 2022

- Collaborated with other students on a university project investigating, designing and assessing models of the quasi-biennial oscillation, a complex weather phenomenon.
  - Lead R programmer, researching and implementing novel techniques for modelling weather oscillations.
  - Conducted risk assessment and critical path analysis to ensure project was delivered accurately and on time.
  - Co-authored research paper outlining results and presented to senior academics.

#### **EMPLOYMENT & VOLUNTEERING**

# Research Team member, University of Warwick

February 2024 - present

- Providing support to the WUST project, aiming to create a toolkit to enable students to effectively project manage.
  - Collaborating with large research team of academics and students to generate new resources to support students.
  - Meeting deadlines to action outcomes of project meetings.
  - Facilitating focus groups, including arranging locations, recruiting participants and leading discussions.

# Clinical Division intern, Intelligent Ultrasound

July 2023 - September 2023

- Led a research project on Generative Adversarial Networks (GANs) for ultrasound imaging.
  - Utilised Python and PyTorch to adapt existing code for compatibility with the company's architecture.
  - Used data engineering techniques to utilise database of 1.3 million images.
  - Conducted training for multiple GAN models to generate images.
  - Successfully demonstrated proof of concept for integrating GANs with ultrasound imaging.
- Created report on customer engagement with e-learning product.
  - Conducted thorough data cleaning and exploration using pandas to extract valuable insights.
  - Provided feedback to the team, highlighting key points for potential improvements, using data visualisation.

# Data assistant, Insights Team, Exeter Students' Guild

November 2022 - June 2023

- Designed and administered student surveys that were distributed to 20,000+ students.
- Analysed survey results in collaboration with other data sources.
- Delivered timely and accurate insights to stakeholders to inform organisation-wide decisions.
- Underwent equality and diversity training to foster an inclusive environment.
- Provided administrative support to full-time staff.

#### Teaching assistant. University of Exeter

September 2022 - December 2022

- Co-ran support session for first-year mathematics students using the peer-assisted learning technique.
- Provided feedback on how students responded to new methods of teaching.

# Treasurer, University of Exeter MathSoc

August 2022 - August 2023

- Organised large events attended by 100+ students.
- · Ensured society finances were managed according to Guild policy.
- Met deadlines to allow for smooth running of events.

# Bartender, Various companies

September 2021 - November 2022

- Excelled in fast-paced environment requiring constant adaption.
- · Worked closely with colleagues to meet tight deadlines.

#### **INTERESTS**

**Professional**: Public engagement with statistics, clinical trials, statistical genetics, improving student engagement.

Personal: Running, Cycling, Reading, Cricket & Rugby.

#### **REFERENCES**

**Professor David B. Stephenson** – Academic tutor, University of Exeter - d.b.stephenson@exeter.ac.uk **Mr Sacha Walton** - Software engineering manager, Intelligent Ultrasound - sacha.walton@intelligentultrasound.com **Dr Martyn Parker** - Academic tutor, University of Warwick - martyn.parker@warwick.ac.uk