# Samantha Pendleton BSc MSc

# IT GRADUATE | DATA SCIENTIST | PhDc CLINICAL INFORMATICS

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github.com/sap218



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# **PROFILE**

Currently a PhD student in Clinical Informatics after finishing my Masters postgraduate degree in Data Science: Bioinformatics. I have an extensive set of skills, ranging from data science applications, bioinformatics, IT and business. I am an organised individual, who works well through fast-paced environments and with colleagues. I have strong experience in assisting individuals, specifically students, throughout my employment and educational practises.

#### **SKILLS**

#### **DATA SCIENCE**

Bioinformatics, Statistics, Data Mining Machine Learning, Ontologies, Text Mining

#### **BUSINESS**

System Analyst, Business Planning, Visualisations and Presentations

#### **LANGUAGES**

Python & R; HTML, CSS, & PHP; SQL: PostgreSQL, SQLite, & NoSQL

IT

Administration, Operating Systems Cyber Security, Various Software

# **PROJECTS**

» Metagenomics of Acid Soil – a study of long reads

Postgraduate Masters Dissertation in Bioinformatics/Computational Biology (2018) acidoseq: Python (v3.5) package on Acidobacteria; available: <a href="https://github.com/sap218/acidoseq">https://github.com/sap218/acidoseq</a>

» An analysis of current software for nanopore metagenomic data

Bioinformatics/Computational Biology Research Project (2017)

Computer Science department at Aberystwyth University; available: <a href="https://doi.org/10.1101/288969">https://doi.org/10.1101/288969</a>

# **EDUCATION**

» PhD student in Clinical Informatics (2018+)

Medical School, Institute of Translational Medicine at University of Birmingham

Thesis: "Creating an Al based data assistant to bridge genotype to metadata linking primary clinical data

to biobank sample"

» Masters graduate in Data Science (2017-18)

Merit - Computer Science (MSc) at Aberystwyth University

Dissertation: "Metagenomics of Acid Soil"; acidoseq: Python (v3.5) package

In fulfilment of Masters Degree; Computer Science, Aberystwyth University

Additional: Advisor/Demonstrator, President of Computer Science Society

» Bachelors graduate in Business Information Technology (2014-17)

2:1 - Computer Science (BSc) at Aberystwyth University

Dissertation: Web Major Project: The Little Cake Box; available: <a href="http://users.aber.ac.uk/sap21/">http://users.aber.ac.uk/sap21/</a>

In fulfilment of the Bachelors Degree; Computer Science, Aberystwyth University

Additional: Demonstrator, Peer Mentor

» **A-levels** (2012-14)

IT (D\*D\*) Home Economics [Health & Social Care] (M)

Advanced Subsidiary: Mathematics & German Extra-Curricular: Art

# **EXPERIENCE**

» Researcher, Bioinformatics; Aberystwyth University (2017)

Project: "An analysis of current state of the art software on nanopore metagenomic data"

Poster: https://github.com/sap218/misc

» Assistant; Information Services at Hugh Owen Library, Aberystwyth University (2016-17)

Jobs: Assisted staff, attended focus groups, made strategy & floor plans

» Student Worker; AberWorks, Aberystwyth University (2016-18)

Jobs: Demonstrator/Advisor, Summer Operative: Ambassador

» Classroom Assistant; Rimrose Hope Primary School (2011)

Jobs: Helped plus guided pupils

Volunteering/Charity Work; educational environments (2006-17)

Jobs: Environmental work, assisted with charity events, aiding the elderly

Peer mentor for the Computer Science Department

#### **ACHIEVEMENTS**

» BCS Lovelace Colloquium attendee (2017-18)

- Finalist ('18): An analysis of current software for nanopore metagenomic data

- Attendee ('17): Making sites attractive

Aberystwyth/Sheffield University Women's Conference; posters: https://github.com/sap218/misc

» Manual Handling Course (2016-17)

Certificate from Aberystwyth University

» Diversity Certificate (2016)

Diversity in the workplace training from Aberystwyth University

» Work Shadowing Volunteer (2016)

Peer Mentor participation at Aberystwyth University; Careers Service Volunteer Work Placement

# **INTERESTS**

I enjoy a wide variety of activities; I appreciate cinematography, reading small fictional novels, and music. I am keen on puzzles; involving video games plus chess. Most of my time is spent on personal projects: I am a keen individual, focused on developing my knowledge during my spare time through web browsing. Projects can be found in my GitHub portfolio; with blogs discussing some of these projects can be found in my personal site here: <a href="https://sap218.github.io/">https://sap218.github.io/</a>.

# **PUBLICATIONS**

"An analysis of current state of the art software on nanopore metagenomic data"

Samantha C Pendleton bioRxiv 288969; doi: https://doi.org/10.1101/288969

Note: article is a preprint and has not been peer-reviewed

"Metagenomics of Acid Soil; a study of Nanopore long-reads and Acidobacteria"

Samantha C Pendleton, et al. **Note**: article is currently in progress