

Samantha Pendleton BSc MSc

IT GRADUATE | **DATA SCIENTIST** | PhDc CLINICAL INFORMATICS

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PROFILE

Currently a PhD student in Clinical Informatics/Bioinformatics after completing my Masters postgraduate degree in Data Science. 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, able to communicate effectively 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

LANGUAGES

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

BUSINESS

System Analyst, Business Planning,
Visualisation, Communication, and Presentation

IT

Administration, Operating Systems
Cyber Security, Countless Software

PROJECTS

» **Metagenomics of Acid Soil – a study of long reads**

Postgraduate Masters Dissertation in Bioinformatics/Computational Biology (2018)

acidoseq: Python (v3.5) package aimed to study Acidobacteria; available: <https://github.com/sap218/acidoseq>

» **An analysis of current software for nanopore metagenomic data**

Bioinformatics Research Project, Summer (2017)

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

EDUCATION

» **PhD** student in Clinical Informatics (2018+)

Medical School, Institute of Translational Medicine at University of Birmingham

Thesis: "Creating an AI based data assistant to bridge genotype to metadata linking primary clinical data to biobank sample"

Additional: Machine Learning, Text Mining, Ontologies, Statistics

» **Masters** graduate in **Data Science** (2017-18)

Merit - Computer Science Postgraduate (**MSc**) at Aberystwyth University

Dissertation: "Metagenomics of Acid Soil": **acidoseq**; PG dissertation: <https://github.com/sap218/misc>

In fulfilment of the Postgraduate 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 Undergraduate (**BSc**) at Aberystwyth University

Dissertation: Web Major Project: The Little Cake Box; UG dissertation: <https://github.com/sap218/misc>

In fulfilment of the Undergraduate 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"
 Bioinformatics 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 at Aberystwyth University

ACHIEVEMENTS

- » **BCS Lovelace Colloquium** attendee (2017-18)
 - Finalist ('18): An analysis of current software for nanopore metagenomic data
 - Attendee ('17): Making websites 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
- » **Peer Mentor** 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. Plus, I am keen on puzzles; as such Chess. I enjoy creative hobbies/crafts; having created pillows, paintings, and knitting. Most of my time is spent on personal projects, which I progress during my spare time – I focus on developing my knowledge through these individual ventures and via 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: <https://sap218.github.io/>.

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