

Mohammed Rahman

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PROFILE

I am a Python programmer and data analyst with a PhD in Chemistry, boasting over five years of programming experience in Python and R. Recognised for my ability to work effectively under pressure and meet tight deadlines, I have developed various data analysis programs showcased on my GitHub. For more information please view my personal website.

EXPERIENCE

Dec 23-present, Bioinformatician, Bioinformatics Research Technology Platform (RTP) at the University of Warwick, UK

- Constructed and presented effective bioinformatics tools and workflows using python, R and JavaScript. Implemented version control through Git to ensure systematic tracking and collaborative development.
- Developed an intuitive online visualisation tool within the EnteroBase system, designed to effortlessly generate publication-ready figures. Streamlined the user experience to cater the needs to over 4,200 active global users ensuring ease of use and accessibility.
- Participated in conferences to promote the department and showcase its services to attract potential customers and foster collaborations.
- Engaged in student clinics to assist individuals with coding and bioinformatics enquiries.

Sept 20-Jan 24 PhD in Chemistry, University of Warwick, UK

- Extracted data from diverse sources, including online databases, papers, and websites; and in some instances, employed web scraping with Pandas to gather this information.
- Conducted statistical testing using Python and R, employing methods like linear regression and t-test to analyse data trends.
- Automated data analysis procedures in Python, streamlining the generation of publishable figures and tables with a single click, demonstrating meticulous attention to detail in validating software results for numerous data points.
- Operated high-end instrumentation, conducting constant checks to maintain optimal functionality.
- Developed and published an online calculator on GitHub, featured in a scientific journal, for performing innovative calculations. I have extensively reviewed various journals to ensure accuracy of these calculations.
- Presented at seven scientific conferences, developing proposals for each, and engaging with diverse professionals; successfully secured over five grants.

EDUCATION

2020-2024 PhD in Chemistry, University of Warwick.

2019-2020 MSc in Analytical Chemistry, Distinction, University of Warwick.

2015-2019 BSc (hons) Chemistry, First, University of Surrey.

SKILLS

Computational:

- Python
- R
- HTML
- CSS
- Bash
- Shell
- JavaScript
- SQL
- Linux
- HPC
- Database management
- Database visualisation

Transferrable:

- Statistical Testing
- Problem Solving
- Writing
- Communication
- Teamwork
- Leadership
- Listening

LANGUAGES

- English (fluent)
- French (basic)
- Spanish (basic)
- Bengali (mother tongue)

- Managed data-sensitive materials, adhering to data protection policies and obtaining clearance before presentation and publication.
- Supervised PhD, MSc, and final year BSc students, providing training and guidance for their experiments and reports.
- Authored and published three impactful scientific manuscripts with additional co-authorship forthcoming.
- Collaborated on various projects, working closely with collaborators to understand their data requirements and deliver up-to-date reports for continuous progress in research.

Jun 19-Sep 19 Research Assistant, Superdielectrics Ltd, Guildford, UK

- Engaged in the development and assessment of cutting-edge biodegradable supercapacitors within the manufacturing process. Established a comprehensive database to visualise trends across various batches.
- Oversaw laboratory operations, maintaining excellent housekeeping standards to ensure the facility's readiness for inspections.

Sep 18-Jun 19 Course Representative, University of Surrey, Guildford, UK

- Collaborated with final year students to gather their feedback on the course structure and content for transmission to the student-staff liaison committee.
- Compiled reports based on student input and facilitated communication with academic staff, ensuring that opinions were effectively conveyed across all academic levels.

Sep 18- Jan 19 Membership Advisor, Surrey Sports Park, Guildford, UK

- Provided exceptional customer service by welcoming and assisting members of the public at the front desk of the gym.
- Effectively managing membership enquiries, registrations, and renewals with a friendly and approachable demeanour.
- Offer guidance on gym facilities, equipment usage, and membership options to enhance member experience.

HOBBIES AND INTEREST

- I've served as the captain in 5-a-side football games for over five years, leading the team in weekly matches.
- I dedicated over three years to training in Japanese Ju Jitsu, progressing through various gradings to achieve higher belts. Each grading demanded patience, intense concentration, and adaptability to unknown scenarios set by the sensei. I've earned the trust to lead some sessions, following instructions and supervision from the sensei.
- My passion for fitness and calisthenics drives me to continuously learn new skills, setting and accomplishing new targets on a weekly basis. I find joy in cooking and meal preparation, exploring diverse culinary experiences.
- Lastly, I am actively enrolled in DataCamp, an online course for training data scientists. Regularly engaging with the platform, I consistently strive to enhance my coding skills.

REFERENCES

References available from Professor Sascha Ott (s.ott@warwick.ac.uk) and Richard Stark (r.stark@warwick.ac.uk), at the Bioinformatics RTP.