

Humza A. Shaukat

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LinkedIn: <https://www.linkedin.com/in/humza-shaukat/>

GitHub: <https://github.com/HumzaShaukat>

Portfolio: <https://humzashaukat.github.io/MyPortfolio/>

Skills

Frontend: JavaScript, HTML5, CSS, jQuery, Bootstrap, ReactJS

Backend: Python, C++, Node.js, Express.js, MySQL, MongoDB, mongoose, sequelize

Statistical: Pandas, MATLAB, R

Data Analysis: SpotFire, GraphPad Prism

Coding Education and Experience

Scientist III at Parexel on assignment to Merck, Kenilworth, New Jersey

May 2022 - Present

- Managed large-scale experiments in cell culture and plasmid manipulation while documenting all details meticulously in an Electronic Lab Notebook
- Utilized Geneious Prime to design experiments manipulating DNA, creating sequencing primers, and constructing plasmids
- Optimized Fed Batch shake flask protocols to better compare to those performed on Ambr 15 Bioreactor
- Created scripts using Pandas to organize data for use with Spotfire data analysis
- Co-led department adoption of bioinformatics assays by analyzing Next Generation Sequencing and RNA sequencing data

Research Lab Specialist Associate at Jones Lab, Ann Arbor, Michigan

July 2018 – January 2021

- Trained graduate students how to perform patch clamp experiments as an electrophysiology specialist
- Designed and developed SOPs for electrophysiological recording in cultured cells, in vivo zebrafish larvae, and brain slices
- Conducted large scale image analysis using imageJ and WEKA machine learning
- Created scripts in MATLAB and Python for quantitative analysis of imaging data
- Organized data in GraphPad Prism for statistical analysis creating material for grant proposals and academic publications

Research and Data Analysis

Research Assistant at Pletcher Lab, Ann Arbor, Michigan

June 2015 – June 2018

- Designed, prepared, and maintained experiments regarding dietary restriction and its effects on aging in *Drosophila*
- Published a paper with Dr. Yang Lou in *eLife Sciences* titled, “Serotonin 2A receptor signaling coordinates central metabolic processes to modulate aging in response to nutrient choice” (DOI:10.7554/eLife.59399)

Research Assistant at Wong Lab, Ann Arbor, Michigan

August 2016 – June 2018

- Performed in vitro whole cell recording on retinal ganglion cells applying necessary chemicals to elicit responses
- Analyzed action potential patterns of ganglion cells and identified changes in firing rate and resting potential

Authentic Research Connection Biology Lab, Ann Arbor, Michigan

January 2018 - March 2018

- Used CRISPR-CAS9 to induce mutations into our ancestral strain and observe changes in fitness compared to evolved strain
- Executed Linux-based commands to run *breseq* and analyze mutations in DNA comparing multiple strains to an ancestor
- Conducted whole genome sequencing to compare mutations between different strains of yeast

Clinical Experience

Medical Assistant at Dermatology Specialist of Canton, Canton, Michigan

March 2021 – April 2022

- Assisted a surgeon in performing Mohs surgery by assisting in excising tumors and managing hemostasis
- Served as first assist during complex plastics repairs such as skin grafts, advancement flaps, and interpolation flaps
- Accompanied and scribed for attending physicians during general dermatology visits serving as point of contact for patients
- Led teams of medical assistants in assisting different physicians in office visits and surgical procedures
- Assisted in developing SOPs that increased surgical efficiency by 10% and reduced costs by 5%

Leadership Experience

Muslim Student Association Operations Lead, Public Relations and Education Chair, Ann Arbor

September 2014 - April 2018

- Communicated and coordinated proper operation of the student organization and its events with university administration
- Led and organized Mental Health Awareness Week to highlight the overlooked issue in the Muslim community
- Supervised a committee of students to plan and execute educational events for the community

Education

Rutgers University

New Brunswick, NJ

Coding Bootcamp – Certificate of Completion

In Progress

Michigan State University

East Lansing, MI

Graduate Certificate in Medical Neuroscience

August 2020

University of Michigan

Ann Arbor, MI

Bachelor of Science in Neuroscience

April 2018