SYED ARSALAN GHANI

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EDUCATION

Dual Degree Candidate: University of Rochester

Bachelor of Science in Computational Biology Expected Graduation: May 2022

Bachelor of Arts in Social Psychology Shelby-Davis Scholar

RESEARCH, DESIGN & DATA ANALYSES EXPERIENCE

Social Cognitive Development Lab under Dr. Laura Elenbaas

2018 - Present

Pre-Law Track

Research Assistant; University of Rochester

- Collecting data, interviewing, and running statistical analyses on research studies related to children's biopsychology and development,
- Utilizing open-source coding software in Python & R, and SPSS to develop measures in understanding children's economic stress and moral concerns: and subsequently drafting abstracts, research papers and presenting them,
- Designing and executing an year-long Honor's Thesis establishing the factors behind sexual identity disclosure in adolescents using self-collected data from local high schools.

Chen Lab under Dr. Nancy Chen

2019 - Present

Research Assistant; University of Rochester

- Coding in Python and R to digitalize pedigree data to explain genetic drifts and phenotypic selection,
- Computationally analyzing with Visual Basic Editor in Microsoft Excel to automate reports regarding research subjects and relevant predictors,
- Utilizing statistical tests to determine strength of phenotypic selection on an undisturbed and a suburban population of Florida Scrub-Jay through phenotypic traits and fitness components.

PUBLICATIONS, POSTERS, AND AWARDS

Journal of Undergraduate Research

2020

<u>Ghani, S.A.</u> (2020). Calling The Cops: How Race/Ethnicity and Gender Contribute to the Perception of the Police in College. *Journal of Undergraduate Research, Spring, pp. 25-27*.

Harvard College 2019

Undergraduate Presenter; National Collegiate Research Conference

Syed Arsalan Ghani and Dr. Laura Elenbaas, "Young Children's Perceptions of Peers from Different Economic Background," presented at Harvard University and National Conference on Undergraduate Research (NCUR) at Kennesaw State University.

Undergraduate Statistics Project Competition

2019

Second-Place Winner; Sponsored by Google and R-Studio

Submission: "Calling The Cops: How Race/Ethnicity and Gender Contribute to the Perception of the Police in College."

WORK AND HUMAN RESOURCE EXPERIENCE

Departments of Mathematics, Computer Science, Biology, and Psychology

2018 - Present

- Teaching Assistant
- $\bullet \quad \text{Tutoring \sim200 students enrolled in STAT212: Applied Statistics for Biological and Physical Sciences focusing on R,} \\$
- Tutoring 40 students enrolled in CSC161: The Art of Programming with a focus on Python language,
- Leading discussion groups of 40 students in PSYC181: Theories of Personality and Psychotherapy,
- Instructing lab sections for BIOL198p: Genetics in advanced lab techniques such as PCR and gel electrophoresis.

Department of Biology, Business Office.

2018 - Present

Undergraduate Finance Assistant; University of Rochester

- Using Microsoft Excel and Google Sheets to keep track of over 50 National Institute of Health and National Center for Biotechnology Information grants awarded to the Biology faculty,
- Encumbering and accounting for expenses related to research and presenting results and activity to faculty, department heads, and deans.

TECHNICAL KNOWLEDGE AND SKILLS

• Computer: R, Python, Mathematica, SPSS, MATLAB, SQLite, and advanced Microsoft Office.