SCOT HIGHLANDER

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EDUCATION

University of California, Riverside
Master of Science, Bioengineering June 2025
Relevant Coursework: Cardiovascular, Renal, Translational Biomedical Research, Cellular and Molecular Engineering

Bachelor of Science, Bioengineering June 2022

TECHNICAL SKILLS

Laboratory: Circular Dichroism (CD), Static Light Scattering (SLS), Gel Electrophoresis, High Pressure Liquid Chromatography (HPLC), Protein Expression, Osmometer
Computer: ViewLogic, SolidWorks, ABAQUS, MatLab/Simulink, AutoCAD, PSpice, TableCurve, COMSOL, JAVA, C/C++, LabVIEW, Assembly Language, Microsoft Office Suite

BIOENGINEERING RESEARCH AND DESIGN EXPERIENCE

Teaching Assistant March 2024 – Present
Department of Bioengineering, UC Riverside

- Facilitate laboratory and class discussions of up to 40 undergraduate students in bioinformatics and engineering
- Develop weekly experimental design lesson plans and instruct students on laboratory project goals
- Conduct research on stem cells and diseases such as cancer using video bioinformatics tools

Research Project September 2023 – Present
Department of Bioengineering, UC Riverside

- Assist post-doctoral candidate in performing research and data analysis on the current impact of diseases in human health by utilizing image-processing software to extract data of flow patterns
- Study embryogenesis, wound repair, and cite scholarly articles for research findings

Undergraduate Researcher January 2022 – June 2022
Center for Environmental Research and Technology (CE-CERT), College of Engineering, UC Riverside

- Analyzed extracellular matrix and the growth of healthy tissue using a Multiphoton fluorescence microscope
- Studied samples of collagen to determine the results and the necessary design changes
- Updated and modified lab and safety policy and procedures to ensure an effective use of lab equipment

WORK EXPERIENCE

Resident Advisor September 2020 – June 2022
Residential Life, UC Riverside

- Facilitated the personal growth of 550 residents, encouraged and enforced the compliance of community standards, and addressed various security issues in crisis situations
- Served as the Leadership Advisor to students and participated in training on inclusive diversity practices
- Recruited and interviewed resident advisors as part of the selection committee

PROFESSIONAL AFFILIATIONS AND INVOLVEMENT

Vice President, Bioengineering Graduate Student Association (BE-GSA) June 2024 – Present
Member, BioMedical Engineering Society August 2020 – June 2022
Member, Tau Beta Pi, National Engineering Honor Society August 2019 – June 2022