

Heather L. Borgard

Phone: 808-376-5084; Email: hbrgrd@gmail.com

<https://hborgard.github.io/>

Summary

Current Research Associate working at OHSU as an Informatician. Biomedical Engineering MSc graduate with 6 years of full-time research work experience at various universities in the US and Canada. I have a strong background in computer science and a passion for interdisciplinary collaboration.

Technical Skills

3D rendering and model creation (Amira, Avizo, Blender), Bioinformatics (R), Biomechanical simulation, CAD (Solid Works), Image segmentation, Mathematical modeling (MATLAB, Python, R), Medical Image Analysis (CT, MRI, DTI), Microcontroller programming, Programing languages (C, C#, C++, Java, Python), Statistical analysis (SPSS, R), VR/AR (Unity)

Education

Master of Applied Science in Biomedical Engineering

May 2020

University of British Columbia, Canada

Bachelor of Science in Biomedical Engineering

May 2015

Arizona State University, Tempe, AZ

Professional Experience

Research Associate (Informatician I)

Jan. 2022-Present

Oregon Health & Science University | Portland, OR

- Developed mathematical model in Python and R using EHR data to predict patient appointment attendance and cancellations for OHSU hospital system
- Researched how baseline recordings affect data quality using national and local registries of ophthalmological data

Bioinformatics Program Manager

Jun. 2020-Jan. 2022

Research Corporation of University of Hawaii | Honolulu, HI

Oversees all administrative needs of a large research program (over 20 students and researchers) that focuses on cancer detection. Manages the budget planning, spending, and reporting of over 9 various grants for the entire Bioinformatics Core

Key Accomplishments:

- Co-authored three academic publications
- Helped the Core with grant submission to receive multiple NIH funded and infrastructure grants

Graduate Research Assistant

Sep. 2017- Dec. 2019

University of British Columbia | Vancouver, Canada

- Collaborated with researchers and physicians to predict postoperative functional outcomes following mandibular reconstruction surgery through patient-specific computer simulations of mastication

Auxiliary Animal Care Technician

Jul. 2018- Dec. 2019

University of British Columbia | Vancouver, Canada

- Delivered superior animal care in a research facility contributing to research teams across the UBC campus

Research Assistant

Nov. 2015- Jul. 2017

Midwestern University | Glendale, AZ

Managed the lab by creating policies and procedures, maintaining resources, and training students. Oversaw multiple research projects and interdisciplinary collaborations

Key Accomplishments

- Contributed to the overall data collection, analysis, and writing of two publications

Capstone Project

Aug. 2014 - May 2015

Arizona State University / Tempe, AZ

Universal Bioreactor for Tissue Engineering of Hollow Organs

- Interacted with physicians to construct a bioreactor for tissue engineering of hollow organs, involving extensive research of medical equipment systems, engineering design, and product development

Volunteering and Activities

Overt Foundation

Mar. 2021 – Sep. 2021

Grant Writer

- Perform extensive research and craft detailed proposals to obtain funding for patients of the program, outreach opportunities, and various administrative costs for the non-profit organization

Teacher Partnership Volunteer

Oct. 2017 – Dec. 2019

Let's Talk Science, University of British Columbia

- Designed science curriculums and led science activities and presentations for grades 4 through 8.

ProC.U.R.E Volunteer

Feb. 2013 – Mar. 2015

Project C.U.R.E.

- Repaired, cleaned, packaged medical equipment for delivery to underserved areas.

EMT Volunteer

Aug. 2013 – Dec. 2014

Arizona State University Student Emergency Medical Services (SEMS)

- Provided direct patient care on the ASU campus as a first responder.

Languages

English (Native)

Mandarin (Intermediate)