Christina Holshue (609)-744-4361

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EDUCATION

Bachelor of Science, Major in Biomedical Engineering Minor in Electrical and Computer Engineering

anticipated May 2023

Rowan University, Glassboro, New Jersey GPA- 3.75, Dean's List (Fall 2019-Spring 2021) Rowan Foundation Scholarship & Rowan Scholars Program Scholarship

TECHNICAL SKILLS

Operating Systems: Windows, MAC OS

Communication: Microsoft Office (Word, Excel, PowerPoint), Google Drive Suite

Design Tools/Software: CAD, SolidWorks, MATLAB, ImageJ, PrusiaSlicer, Cura, DipTrace,

Mechanical Tools/Skills: Nikon Eclipse Ti2 microscope, confocal microscopy, SLA printer, FDM 3D printer, bioprinter, PCB milling, laser cutter, surface mount and through hole soldering, micro pipetting, drill press, table & miter saw,

RELEVANT EXPERIENCE

Research Lab, Rowan University, Camden NJ

Spring 2021-Winter 2022

- Cultured and split sarcoma cells
- Captured Z-stack images of cell spheroids using Nikon Eclipse Ti2 microscope
- Conducted live-dead staining and processed live-dead images using ImageJ
- Edited and expanded MATLAB code to automatically process cell migration distance
- Conducted mass transfer diffusion experiments of RhB in hydrogel
- Wrote GCode for bioprinter to print 3D structures out of hydrogel
- Co-authored research paper to be published

3D-Printing Fall 2020-Present

- Maintained 3D printing fabrication center for Rowan University
- Enhanced 3D printer with a Raspberry Pi and camera module to print and monitor remotely
- Printed prosthetic hands and arms for a startup society
- Printed Rowan University community projects for classes and research
- Designed in Solidworks and 3D printed prototypes for personal and professional projects: prosthetic hand, automatic cat feeder, functional apparatuses for labs

Electronics Fall 2020-Present

- Designed PCB schematics and boards in DipTrace
- Milled and surface mount soldered PCBs
- Created an Arduino automatic cat feeder
- Developed custom ornament PCB

Design projects, Rowan University, Glassboro NJ

Fall 2020-Spring 2021

- Created salt leached porous PCL scaffolds and explored the impact of different parameters
- Determined the optimal parameters for lung tissue- Sophomore Clinic

COMMUNICATION, TEAMWORK, AND LEADERSHIP

- Completed semester-long, multidisciplinary team projects
- Student worker for an engineering team- multidisciplinary team that consist of collaboration, networking, and giving back to the community
- Wrote and presented progress reports, memos, and white papers
- Managed team, planned projects, and presented deliverables