



# Wil Groves

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## Skills

**Engineering Software:** SolidWorks, Creo, Star-CCM+, ANSYS, Comsol, Minitab, LabVIEW, AutoCAD, Jira

**Programming Languages:** Python, MATLAB, C++, JavaScript, G-code, HTML, CSS

**Programming Software:** Arduino, Linux, Bash, Slurm, GitHub, Git, scikit-learn, TensorFlow, PyTorch, VS Code, AWS, Docker, Streamlit, FastAPI

**Technical:** 3D Modeling/Drafting, CFD, FEA, 3D Printing, Bioprinting, Machining, Statistical Analysis, Lithography, Mammalian Cell Co-Culture, 3D Cell Culture, Immunostaining, Fluorescent Microscopy, Microfluidic Chip Design & Manufacturing, GD&T, SW/HW Integration

## Experience

07/2021 – 12/2022 **Graduate Teaching Assistant**, University of North Carolina at Charlotte  
Instructed students in thermal-fluids laboratory and provided teaching assistance for introduction to dynamics.

06/2018 – 01/2020 **Mechanical Engineer**, Green Therapeutics  
Collaborated within a multi-disciplinary team to develop and launch various Cannabidiol based products.

05/2018 – 07/2020 **Research Lead**, Brain-on-a-Chip Lab, University of North Carolina at Charlotte  
Led both individual and collaborative projects, performed research, design, simulation, fabrication, and in-lab testing of microfluidic and bio-printed human brain models.

## Education

12/2022 **Master's Mechanical Engineering**, University of North Carolina at Charlotte  
Concentration: **Thermal Science and Fluid Mechanics**

12/2019 **Bachelor's Mechanical Engineering**, University of North Carolina at Charlotte  
Concentration: **Biomedical Engineering**

12/2016 **Associate of Science**, South Piedmont Community College

## Publication

1. I. Wetzel, **W. Groves**, H. Cho "Single-Step, Versatile, Highly Viable Bioprinting of 3D Perfusable Brain Tissue Using Adaptable Microfluidic Print Head" UNCC Library, 2019

## Conferences

1. **W. Groves** and K. Rubio, I. Wetzel, H. Cho. Co-Axial Extrusion of Multicellular Blood-Brain Barrier. 2019 Tissue Engineering and Regenerative Medicine International Society Americas Conference, Orlando, FL, 2019

2. **W. Groves** and M. Bae, YJ. Kang, J. Jang, HG. Yi, DW. Cho, H. Cho. Development of Physiologically relevant Human Brain Models by Using Brain Decellularized Extracellular Matrix, Biomedical Engineering Society Conference, 2019