Janna Gilleman

jannagilleman@gmail.com | 413-687-8121 | Northampton, MA
Website & Portfolio: www.jannagilleman.com | **Linkedin:** http://bit.ly/44Nbcof

EDUCATION

Smith College, Northampton MA
September 2020 - May 2024 (expected)
- BS in Engineering Science, Focus in Electrical Engineering and Sustainability, GPA 3.78/4.0

Danish Institute for Study Abroad, Stockholm SE Spring '23
- Studied Sustainable Engineering; focused on wastewater, life cycle analysis, carbon sequestration & city infrastructure. Study tours of biomedical research being done at the Nobel Prize's Karolinska Institute.

EXPERIENCE

Honda Autonomous Mobile EV Charger, Systems & Mechatronics Engineer; Q2 Project Manager
September 2023 - May 2024
- Year long senior capstone project, sponsored by Honda, to design an autonomous, mobile, electric vehicle charging station.
- Lead analysis of stakeholder needs, creation of design requirements, project scope, and concept tradeoffs.
- Building physical prototype of AI plug/unplug docking system & framework for UI/UX app in spring '24.
- Responsible for all CAD, electronics, and programming AI scripts using YOLOv7, TensorFlow, and PyTorch.

3D Printing Farm Manager, Smith College
August 2023 - Present
- Design and host weekly seminars, teach students to 3D print and use CAD; coded their new website.

Werfen Polymer Injection Lab, Smith College— Researcher
June 2023 - August 2023
- Created AI image detection system to precisely fill small sensor cards with resin, then UV cure them.
- Designed and built the microelectronics system using Rasp Pi and I/O port connection with smart pump.
- Modeled and 3D printed the mechanical fixture and co-programmed the AI scripts using OpenCV.
- Our system was 50% more successful than its manual, human-operated counterpart.

Tiny Foundations, Essex CT— Intern and CAD artist
June 2022 - September 2022
- Designed a sustainable community and two new tiny house stock models based on consumer demographics. Also physically assembled custom steel framed Tiny House on wheels.
- Rendered interior models of stock houses in Blender and was hired again in the fall to continue this work. The rendered models were displayed on their website to attract more customers.

Sustainable Materials Lab, Smith College— Researcher
June 2021 - February 2022
- Fabricated and tested tensile strength of a new, sustainable flax composite material using Instron machine.
- Created a custom sustainable vacuum infusion rig and clamping fixtures that allowed for the standardization of the tabbing process, drastically increasing the amount of collectable data for the study on size effects.

Jarvis Surgical, Westfield MA—Engineering and Manufacturing Intern
2019-2020 Summers
- Edited surgical implant blueprints (OP-sheets) for the engineering team in SIEMENS NX.
- Manufactured high precision surgical knee, ankle, and shoulder implants using multiple machines. (Sand Blaster, Tormach Mill, CMM, Laser Engraver).
- Quality inspected final implants and readied them for shipping.

SKILLS

DIGITAL: Code {C, C++, R, Python, Java, Javascript, CSS, HTML, Assembly, OpenCV}; CAD {Fusion 360, Blender, AutoDesk, Siemens Nx}; Adobe Suite; Misc {Logic Design, Rstudio, Matlab, Simulink, Vscode, Github}; Microcontrollers {Arduino, Rasp Pi, Mbed}
PHYSICAL: 3d printing, wind tunnel, laser cutter, CNC mills, brazing, blacksmithing, sewing, carpentry, stained glass