

STEVEN HYLAND

Mechanical Design, Robotics, Sustainability

914 · 312 · 5161

stevenmhyland.com

[linkedin.com/in/stevenmhyland/](https://www.linkedin.com/in/stevenmhyland/)

stevenhyland1@gmail.com

EDUCATION

GPA: 3.52

Columbia University
May 2019

New York, NY

B.S. Mechanical Engineering

❖ *Kings Crown Leadership Award*

SUNY Westchester
May 2017

Valhalla, NY

A.S. Engineering Science

❖ *Curriculum Award*

❖ *Graduated w/ Honors*

SKILLS

Mechanical Design

SolidWorks

Robotic Design

Finite Element Analysis (FEA)

Python

AutoCAD

Lean Manufacturing

Autodesk Inventor

Adobe Photoshop

Machine Learning

MATLAB

Rapid Prototyping

Microsoft Word, Excel, PowerPoint

LEADERSHIP

ASME Representative

Sept 2018 – May 2019

Engineering Student Council

April 2018 – May 2019

Phi Theta Kappa Honor Society

May 2016 – May 2017

REFERENCES AVAILABLE
UPON REQUEST

EXPERIENCE

Implementation Field Engineer // Seegrid Corp.

Nov 2019 – Present

Implemented and trained Vision Guided Vehicles (VGVs) at dozens of Fortune 500 companies (Amazon, GM, Goodyear, etc.)

Designed and programmed logic to dictate VGVs pathing and intersection control in fleets upwards of 15 robots.

Assembled & qualified VGVs for designed applications. Frequently brainstormed unique solutions to troubleshoot robots.

Mechanical Engineer // Avar Robotics

Sept 2019 – Nov 2019

Created 3D model of existing inventory sorting robot in SolidWorks. Robot intends to be an upgrade to Amazon's package sorting bots.

Designing "mobile" version of robot – adding wheels & drivetrain to preexisting gantry system.

Ultrasound Research Lead // Columbia Creative Machines Lab

Sept 2018 – May 2019

Led mechanical team of 4 and assigned tasks, led meetings and organized research presentations.

Designed a functioning ultrasound probe in SolidWorks and prototyped using rapid prototyping methods (3D Printing).

Mechanical Engineering Intern // Metallized Carbon

June 2018 – Sept 2018

Re-established Lean Six Sigma procedures using 5S methods on most-used press; cut costs by over \$2K yearly.

Performed qualitative and quantitative testing of materials at various steps of manufacturing process. This includes ash, porosity, pressure, density, and hardness tests.

PROJECTS

Tensegrity Robot // Senior Design Capstone

Sept 2018 – May 2019

On a team of 4, designed and fully constructed an actuated tensegrity robot that is able to withstand impact of 6+ ft.

Ran simulations, designed, & prototyped primary hardware, incorporating electronics and software considerations into design.

Pneumatic Spool Valve Project // Machine Design

Fall 2018

Designed, conducted FEA, and ran calculations on a spool valve to divert compressed air. Personally machined and constructed valve.

Light Seeking Arduino Project // Mechanical Engineering Lab II
Spring 2018