

# NIHAR N. GARG

nihar.garg@columbia.edu

www.nihargarg.com

(765) 637-6500

linkedin.com/in/nihargarg

Engineering professional with experience managing technical projects, producing high-value products and providing data-driven solutions. Passionate about working at the intersection of engineering, data, technology and design.

## EDUCATION

### Columbia University

M.S. in **Mechanical Engineering**, Concentration in **Robotics and Control**

New York, NY

*Expected May 2022*

### Purdue University

B.S. in **Mechanical Engineering**, GPA: 3.4 / 4.0

West Lafayette, IN

*May 2016*

Professional Associations: American Society of Mechanical Engineers (ASME)

## PROFESSIONAL EXPERIENCE

### Princeton Engineering Services - Project Engineer

Plainsboro, NJ

- Led the scope, design and construction admin for over 25 MEP/FP projects (>\$50 MM) *Jan 2018 - Dec 2020*
- Performed heating and cooling load calculations to size HVAC equipment, ductwork and piping
- Supervised a multi-disciplinary team of 5 engineers and coordinated between all trades and building codes

### Charles River Development - Associate Systems Analyst, SaaS Operations

Indianapolis, IN

- Managed global operations for and provided tier 2 back-end support to SaaS clients *Jul 2016 - Nov 2017*
- Built and maintained automation workflows on job schedulers and configured database changes using SQL
- Initiated 80+ process improvement strategies which led to a 10% increase in productivity within my team

### Kaiser Aluminum - Intern Project Engineer

Kalamazoo, MI

- Spearheaded 5 projects to improve safety and quality monitoring of plant operations *May 2015 - Aug 2015*
- Devised interim corrective actions and developed long term strategies to prevent recurrence of incidents
- Implemented time sensitive changes to reduce downtime by 15% and presented results to management

## PROJECTS & PRODUCTS

### MATE ROV - Columbia Robotics Club

Columbia University

- Simulated robot motion and control using ROS and optimized design using SolidWorks *Sep 2020 - Present*

### COVID-19 Data Visualization - Self-directed Project

nihargarg.com/covid

- Analyzed and translated large data into actionable information using Tableau and Python *Apr 2020*

### Smart Bin Remover - Engineering Capstone Project

Purdue University

- Designed and manufactured a fully autonomous delivery robot using Arduino *Oct 2015 - May 2016*
- Headed programming, integration and testing of "smart" technologies to remove all user interaction

### Project LiT - HackIllinois Hackathon

University of Illinois Urbana-Champaign

- Produced code to incorporate Arduino components and won top 5 best hack out of 216 projects *Feb 2016*

### Project Green Light - BoilerMake Hackathon

Purdue University

- Collaborated on the design and build of product and won top 5 best hack out of 84 projects *Oct 2015*

### HandiMate / Toys to Physics to Design (T2P2D) - C Design Lab

Purdue University

- Evaluated CAD software based on ease-of-use and organized 3D printing workshops *Aug 2014 - Dec 2014*
- Constructed and animated toy prototypes using a robotics kit and everyday craft materials

## SKILLS & CERTIFICATIONS

**Programming:** Python, C, MATLAB, Wolfram, HTML, JavaScript, Git | **Data:** MS Excel, SQL, Tableau

**Product Design:** CATIA, SolidWorks, ROS, 3D Printing | **System Design:** AutoCAD, LabVIEW, Trane Trace3D

**Licenses & Certifications:** Engineer in Training (EIT), LEED Green Associate, ITIL 4 Foundation

## LEADERSHIP & TEAM BUILDING

### Task Force on Inclusion and Belonging - Task Force Member

Columbia University

- Cultivated an equitable campus culture and learned to communicate across differences *Sep 2020 - Present*

### Boiler Gold Rush International - Team Leader

Purdue University

- Mentored and introduced cross-cultural training programs to 15 international students *Jan 2013 - May 2015*