# NIHAR N. GARG

nihar.garg@columbia.edu (765) 637-6500

www.nihargarg.com linkedin.com/in/nihargarg

Engineering consultant with 4+ years of experience managing technical projects across several industries, producing complex, high-value products and providing data-driven solutions to cross-functional teams. Passionate about working at the intersection of engineering, data, technology and design.

#### **EDUCATION**

**Columbia University** 

New York, NY Expected 2022

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

**Purdue University** 

West Lafayette, IN

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

May 2016

Professional Associations: American Society of Mechanical Engineers (ASME)

## PROFESSIONAL EXPERIENCE

## **Princeton Engineering Services** - Project Engineer

Plainsboro, NJ

- Led over 25 technical projects (>\$50 MM), from conceptual design through completion Jan 2018 - Present
- Performed heating and cooling load calculations to determine design criteria and size system components
- Supervised a multi-disciplinary team of 5 engineers, generated scope reports and created design drawings

# 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**

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

nihargarg.com/covid

• Analyzed and translated large, complex data into actionable information using Tableau

Apr 2020

Smart Bin Remover - Engineering Capstone Project

Purdue University

Designed and manufactured a fully autonomous delivery robot using Arduino

May 2016

• Headed programming, integration and testing of "smart" technologies to remove all user interaction

## Project LiT - HackIllinois Hackathon

University of Illinois at Urbana-Champaign

• Produced code to incorporate all components of a wearable breathalyzer using Arduino

Feb 2016

• Sought feedback from stakeholders, identified new features and won top 5 for best hardware hack

#### **Project Green Light** - BoilerMake Hackathon

Purdue University

Collaborated on the design and build of a beacon which encourages social interactions

Oct 2015

• Conceived innovative uses for product using engineering design process and won top 5 for best hack

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

Purdue University

- Evaluated CAD software based on ease-of-use and facilitated 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, HTML, JavaScript, Git, Bash Data: MS Excel, SQL, Tableau Systems Design: AutoCAD, NI LabVIEW, Trane 3D Plus Product Design: CATIA, SolidWorks

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

#### **LEADERSHIP & TEAM BUILDING**

#### Boiler Gold Rush International - Team Leader

Purdue University

- Mentored and fostered a sense of belonging in a group of 15 international students Jan 2013 - May 2015
- Introduced cross-cultural training programs to promote diversity and inclusion among fellow team leaders