NIHAR N. GARG

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Engineering professional with experience managing technical projects, producing high-value products and providing data-driven solutions. Passionate about the automation of everything and applying transformative technology to create business opportunity. Interested in working at the intersection of engineering, data, technology and design.

EDUCATION

Columbia University New York, NY
M.S. in **Mechanical Engineering**, Concentration in **Robotics and Control** *Jan 2021 - May 2022*

Purdue University West Lafayette, IN
B.S. in **Mechanical Engineering**, *GPA: 3.4 / 4.0* *Aug 2012 - May 2016*

PROFESSIONAL EXPERIENCE

Princeton Engineering Services - *Project Engineer* Plainsboro, NJ
- Led over 25 A&E projects (>$50 MM) through all aspects of the project lifecycle *Jan 2018 - Dec 2020*
- Supervised a multi-disciplinary team of 5 engineers and coordinated work between all disciplines
- Planned and controlled projects to ensure they are delivered on time, to spec and within budget

Charles River Development - *Associate Systems Analyst* 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 and configured database changes using SQL

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 implemented time sensitive changes to reduce downtime by 15%

PROJECTS & RESEARCH

MATE ROV - *Columbia Robotics Club* Columbia University
- Simulated robot motion and control in an underwater environment using ROS gazebo *Sep 2020 - Present*
- Created a virtual model of the rover and optimized design using SolidWorks

COVID-19 Response - *Self-directed Project* nihargarg.com/covid
- 3D Printing: Produced and donated face masks and face shields to my community *Apr 2020 – May 2020*
- Data Visualization: Analyzed and presented large COVID datasets using Python and Tableau

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

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 & RECOGNITIONS

Programming: Python, C, MATLAB, Wolfram, HTML, Git | **Robotics:** ROS, Arduino, 3D Printing, Laser Cutting

Product Design: AutoCAD, SolidWorks, Fusion360, CATIA, OpenSCAD | **Data:** MS Excel, SQL, R, Tableau

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

Awards: Won top 5 at HackIllinois Hackathon for *Project LiT* and at BoilerMake Hackathon for *Project Green Light*

LEADERSHIP & TEAM BUILDING

American Society of Mechanical Engineers (ASME) - *Standards Development Committee* New York, NY
- Contributed to the development and maintenance of robotic arm standards *Feb 2021 - Present*

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*