

Jobin Binoy George

(718)-753-4235 • jb4512@columbia.edu • www.linkedin.com/in/jobinbinoygeorge • <https://geojob.github.io/>

EDUCATION

Columbia University, SEAS

Master of Science in Mechanical Engineering (Concentration: Robotics and Control)

Coursework: Deep learning and neural networks, Data Science for Engineering, Advanced Robotics

New York, NY

Expected Dec 2021

New York University, Tandon School of Engineering

Bachelor of Science in Mechanical Engineering [GPA: 3.6]

Minors in Aerospace Engineering, Nuclear Engineering and Computer Science

Brooklyn, NY

May 2020

PROFESSIONAL EXPERIENCE

Columbia University ROAM Lab

Graduate Research Assistant under the supervision of Dr. Matei Ciocarlie

New York, NY

Nov 2020 - Present

NYU Mechatronics Lab

Robotics Research Assistant

- Simulated multi-nodal robotics behavior on ROS Gazebo using models of turtle-bots
- Implemented tele-operation scripts in Python to study movement of a single node as well as movement of system as a whole
- Wrote publisher and listener methods in C++ to print location and orientation of a node relative to another node
- Linked all existing nodes to a master node and tested communication within a system with TCP/IP protocols

Brooklyn, NY

Aug 2019 - May 2020

NYU LaGuardia Studio

Student 3D Specialist

- Developed intricate prototypes, 3D scans and sculpts using SolidWorks, CATIA and RHINO 3D for professors and students
- Brainstormed with new clients regarding development of new assistive technology
- Tutored clients in modelling and mesh restructuring on Autodesk NETFABB and Ansys
- Assisted in maintenance and operation of various 3D printers (3D Systems, FORTUS, ULTIMAKER) and various 3D scanners (ARTEC Spider, ARTEC Eva and Faro Arm)

New York, NY

May 2018 - Sep 2019

KPMG

Financial Analyst Intern

- Collaborated with senior auditors and associate directors in preparing year-end audits of engineering/ military firms
- Compiled information on engineering firms to prepare presentations for high level management

Abu Dhabi, U.A.E

Jun 2017 - Sep 2017

ACADEMIC PROJECTS

Mechanical Wheelchair for Paraplegic Patients

New York University

- Modelled a mechanical wheelchair, allowing users an ability to stand up, on SolidWorks
- Optimized mechanism of gas springs and linkages on Ansys to smoothen the transition
- Facilitated my senior design team in reducing overall weight of wheelchair by 10% removing excess material on footrest and frame of wheelchair during fabrication processes

Brooklyn, NY

Sep 2019 – May 2020

Structural Analysis of the Transportation Pod for the NYU Hyperloop Team

New York University

- Performed thermal and dynamic structural analyses on Ansys
- Re-designed braking mount and increased strength of mount at high-stress points
- Employed stability suspension component using horizontally positioned gas struts to restrict lateral motion of system by 30%

New York, NY

Sep 2018 – Aug 2019

ACTIVITIES

NYU Mechanical Engineering and Computer Science Study Group

- Initiated a chat and in-person mentoring service for students needing academic and counseling assistance outside lectures increasing peer grades by a minimum of 50%

Sept 2016 – May 2020

SKILLS

Programming: ROS, MATLAB, Python, C++, JAVA, Google Cloud Platform, CUDA/Julia, HTML/CSS, R

Design: SIEMENS NX, SOLIDWORKS, AutoCAD, Rhino 3D, CATIA, DESIGNX

Analysis: ANSYS Mechanical APDL, ANSYS Workbench, Altair Optimization

Prototyping: Additive Manufacturing, Welding, Machining, CNC Milling, Acrylic Laser Cutting