Noà Samarelli

www.linkedin.com/in/noasamarelli | noa.samarelli@columbia.edu
170 W 83rd, NYC 10024 | +1 (332) 207-7128 | Italian, French, and US Citizen

EDUCATION

Columbia University — New York, NY
MS in Mechanical Engineering with Elective Concentration in Robotics and Control — Expected Dec 2021
- GPA: 4.0/4.0
- Coursework: Data Science for Mechanical Systems, Intro to Robotics, Digital Manufacturing, Nano Optics Sensing & Actuation

University of Birmingham — Birmingham, UK
BEng in Mechanical Engineering — Jul 2019
- First-class Honors Student, GPA: 4.0/4.0
- *Coursework:* Engineering Materials, Manufacturing Systems, C Language, Mechanical Design, CFD and FEA

PROFESSIONAL EXPERIENCE

Hardware Intern — San Francisco, CA
Cruise — May 2021 – Present
- Designed and manufactured sensor calibration stations with time optimization of 25%, cost of 3%, and accuracy of 10%
- Implementing BOMs, MIs and design drawings for supplier mass scale production
- Performed data and statistical analysis to assess pass or fail criteria for short ToF Lidar sensor technology

Mechanical Design Engineer — New York, NY
Vessel Technologies — Jan 2021 – May 2021
- Designed modular apartments to achieve technical solutions to the global housing crisis
- Fabricated and optimized structural designs performing FEA analysis to minimize expenses and enhance user experience

Infotrading SAS — Rome, IT
Junior Engineer — Sep 2019 - Jun 2020
- Identified smart home and office products, implementing & supporting deployment of IR, thermal, and radar microwave and radio sensing technology to combine alarm functions with automation and personalized access control

Contact Design — Hong Kong
Robotics Intern — Jun - Aug 2018
- Directed team of 3 in R&D for proof of concept for an automated robotic vending machine, with robotic arm of 3 DOF and XX
- Utilized Fusion 360 to create model drawings and animations for parts distributors and future investors
- Implemented low-cost sourcing strategy to achieve a cost reduction of 7% and a 10% increase in product efficiency

Polygon Technologies — Tzur Yigal, IL
Manufacturing Intern — Jul - Aug 2017
- Tested industrial manufacturing machines' final assembly to increase production speed by 3%, automated guided vehicles to improve route implementation by 2%, and drone satellites to improve underwater resistance by 1.7%
- Collaborated with Caja Robotics, implementing warehouses' automation technologies, to enhance robotic performance by 2%

ACADEMIC EXPERIENCE

Graduate Teaching Assistant – Human Centered Design & Innovation — New York, NY
Columbia University — Jan 2021 – May 2021
- Managed a full class of graduate students (~40) as they develop and design capstone project on innovative transportation methods
- Lead lectures on prototyping, design fidelity and other tools to resonate how well and idea resonates with stakeholders

Graduate Research Assistant - Food Digital Manufacturing — New York, NY
Columbia University – Creative Machines Lab — Sep 2020 – Present
- Developing breakthrough techniques for 3D food printing and cooking using blue and infrared laser technologies
- Designing, optimizing, and slicing 3D CAD food models to allow additive manufacturing production using Solidworks and Slic3r

Research Assistant - Robotics Tactile Sensing Technology — Birmingham, UK
University of Birmingham — Sep 2018 - May 2019
- Developed robotic fingers with tactile sensing technology based on optical fiber sensors (FBG) for robotics disassembly by exploring KUKA disassembly technologies as key enabler for autonomous remanufacturing
- Refined experiment's accuracy up until FBG sensitivity of 9.103 $\mu\varepsilon$, concluding with overall research error of 9%

SKILLS

- Italian (Proficient); Chinese (Intermediate); French (Intermediate); Hebrew (Beginner); Spanish (Beginner)
- C, Python, Solidworks, Fusion 360, MATLAB, Ansys, Abaqus, Slic3r, 3D Printing, Laser Cutting, OpenSCAD, nTop, Inspire