

Shuayb Siddique

MECHANICAL ENGINEERING · NYU TANDON · NEW YORK, NY

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Education

NYU Tandon School of Engineering

Brooklyn, New York

B.S. IN MECHANICAL ENGINEERING | COMPUTER SCIENCE AND AEROSPACE ENGINEERING MINORS

2018 - 2022

Experience

IRUSA

New York, NY

NY DEVELOPMENT MANAGER

Jun 2024 - Present

- Increased venue-based revenue by **69%** (from **\$97k** to **\$164k**) and event revenue by **6%** (from **\$114k** to **\$121k**) year over year
- Managed a portfolio of high-value donors, directly securing approximately **\$777k** in major gifts within a single campaign cycle and sustaining **\$129k–\$130k** in annual contributions through targeted outreach
- Planned and executed high-impact events with **200+** attendees, coordinating volunteers and contractors to meet revenue and timeline targets
- Maintained and analyzed ClickUp CRM data to track engagement, forecast revenue, and identify growth opportunities, while implementing automation-driven workflows (mail merge, SMS tools) to scale donor communications and logging
- Developed google scripts-based tools to improve efficiency of fund development team such as free mail merge, mass SMS blasts, and fund receipt form automated creation based on given Salesforce data

Network Infrastructure, Inc.

New York, NY

PROJECT MANAGER

Aug 2023 - May 2024

- Managed Con Edison Manhattan and Queens contracts overseeing invoicing, costing, pricing negotiations, and job bidding across multiple projects
- Implemented Asana and custom PM tooling to overhaul workflow processes, automating manual steps and eliminating redundancies, reducing coordination overhead across field and office teams
- Built internal job-costing and tracking software to replace ad hoc field visits, and created Gantt charts and WIP reports per contract

Black Cat

Fairfield, CT

ENGINEERING INTERN LEAD

Dec 2020 - April 2021

- Designed and evaluated **98%** efficient planetary gearbox system for clean-tech device using Solidworks and a VEX Robotics setup
- Sourced materials for BOM and engineered height adjustment lever mechanism in Solidworks for minimal cost and wear through initial production
- Analyzed simulations using Fusion FEA and Ansys Fluent CFD to ensure smooth airflow and maximize strength while minimizing material usage

NYU Robotic Design Team

NYU Tandon

ENGINEERING LEAD

Sept 2019 - Feb 2021

- Worked in scrum sprint groups to fulfill duties as part of the CAD and manufacturing mechanical engineering subteams
- Successfully developed sorting mechanism for NASA Lunabotics Competition to distinguish regolith into fine and large particles
- Employed topology optimization techniques in Solidworks to build stronger, more cost-effective parts

Projects

Smart Home Robotic Surveillance & Automation

NYC

PERSONAL PROJECT

Jun 2026 - Present

- Built a local surveillance system across 3–4 cameras and a 4-channel DVR, integrating Ubuntu, Raspberry Pis, repurposed laptops, and an RTX 3060 with Frigate NVR, Home Assistant, and MQTT for **>99%** observed 24/7 uptime
- Implemented vision-based person detection and event-triggered automations, optimized to an **80%** accuracy rate and achieving **sub-2-second** detection latency across three simultaneous RTSP streams
- Iterated on streaming and notification reliability (DVR → RTSP → Frigate → clients), turning Ring integration from **0%** to **near-100%** notification delivery and documenting configuration, test cases, and failure modes

EverFlow

NYC

FOUNDER, ENGINEERING LEAD

Jan 2021 - Present

- Prototyped mechanical in CAD and refined through Ansys FEA
- Implemented Atopile with Claude AI and KiCad to develop production PCB schematics
- Utilized Claude AI to code a website/app ecosystem to track user data and control smart shower device, with AI user insights

FRC 2601 Steel Hawks

Townsend Harris HS

MENTOR, LEAD MECHANICAL ENGINEER, WEBMASTER

Sept 2014 - Mar 2019

- Constructed previous website (steelhawks.net - old) using PHP, JQuery, and other web dev languages
- Designed 2019 championship robot intake system and 2017 launcher system with Fusion 360 and SolidWorks (sketchfab.com/shuaybs)
- Programmed 2017-2018 butterfly drivetrain project with WPILib FRC Java libraries and lead 2018 beta testing team for FRC control systems

Skills

CAD & Simulation

SolidWorks, Fusion 360, Ansys FEA/CFD, 3D Printing

Hardware & Embedded

Arduino, Raspberry Pi, Microcontrollers, Electromechanical Systems

Software & Data

Python, Java, JavaScript, MATLAB, HTML/CSS, Git, Linux/Ubuntu, WordPress

Project Management & Tools

Asana, Smartsheet, MS Project, MS Office, Gantt Charts, Agile/Scrum