NOOR AZIM

✎ noor.419@outlook.com • ☏ 631-530-0408 • noor419.github.io/folio

Mechanical engineering graduate skilled in SolidWorks, AutoCAD, and Rhino with an emphasis on design and manufacturing. Seeking a full-time position as a mechanical engineer in design, production, or the construction sector.

EDUCATION

The City College of New York • *New York, New York* **May 2020**
Bachelor of Engineering (BE) – Mechanical Engineering *GPA:* 3.18/4.0

SKILLS

Software: AutoCAD, SolidWorks, Rhino, woodCAD/CAM, woodWOP, HSMWorks, Cut Rite, ANSYS, MATLAB
Manufacturing: 3.5 Axis CNC, Beam Saw, Laser Cutter, Manual Mill, Lathe, Soldering
Other: Contract Analysis, Cost Estimation, Drafting RFIs, CPM Scheduling, Technical Drawing, Technical Writing

CERTIFICATIONS

FE Mechanical (EIT) • *National Council of Examiners for Engineering and Surveying* **July 2021**

PROFESSIONAL EXPERIENCE

Assistant Design & Manufacturing Engineer • *Twoseven Inc. || Brooklyn, New York* **July 2021 – Present**

- Overseeing and operating 3.5 axis CNC for luxury fashion brand window displays such as Hermès and Van Cleef & Arpels
- Performing regular maintenance and repair on shop machinery including beam saw and CNC mills
- Liaising between CAD and production team to streamline communication thus improving production time and quality
- Facilitating in drafting 3D CAD models of retail displays in Rhino and producing technical drawings for shop fabricators
- Preparing CAD drawings for CNC programming and optimizing program milling capacities using woodCAD/CAM

CUNY Engineering Fellow • *NYC Office of the Comptroller || New York, New York* **October 2020 – April 2021**

- Assisted Professional Engineers in performing cost estimations, contract, and delay analyses for heavy construction claims
- Helped to prepare, review, and submit RFIs to contractors and City agencies
- Worked with attorneys at the Bureau of Law and Adjustment to determine claim merit and recommendations for settlement
- Gained insight on City infrastructure projects regarding water supply, treatment plants, bridges, and tunnels
- Prepared and presented a research report on the impact of the COVID-19 pandemic on construction claims

Advanced Manufacturing Apprentice • *The Zahn Innovation Center || New York, New York* **February 2020 – May 2020**

- Fabricated prototypes and assisted in building client and in-house projects with manufacturing team
- Collaborated with assistant engineers and senior apprentices to create and revise project BOMs when necessary
- Acquired skills in laser cutting, operating manual mill and lathe, and writing G-code in HSMWorks for CNC manufacturing
- Obtained Lean Six Sigma White Belt certification and completed first part of the HAAS Basic Mill Operator certification

ACADEMIC ACTIVITIES

Treasurer • *Women's Robotics Club | The City College of New York* **May 2019 – May 2020**

- Created and submitted bi-annual budget proposals and reports to CCNY student government for club funding
- Oversaw club budget and secured an amount of $1,500 in annual funding for project equipment and supplies
- Coordinated and led robotics workshops, and served as project manager for collaborative Baja SAE team meetings

ACADEMIC PROJECTS

Finite Element Analysis and Design Optimization of a Corkscrew Handle **March 2019 – May 2019**

- Conducted ductile corkscrew experiment to obtain approximate maximum loading points and predict failure behavior of part
- Implemented finite element analysis (FEA) on CAD model of corkscrew to analyze points of failure found at inner corners
- Von-Misses stress convergence tests were used for calculating max loads and optimization of inner corners was executed

MAHNOOR AZIM

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Seeking a full-time position as a mechanical engineer in design, manufacturing and production, or the construction sector. Skilled in 3D modeling using SolidWorks and AutoCAD. Former recipient of a CUNY Fellowship with the Office of the NYC Comptroller.

EDUCATION

The City College of New York • *New York, New York* **May 2020**
Bachelor of Engineering (BE) – Mechanical Engineering *GPA:* 3.18/4.0

SKILLS

Computer: SolidWorks, AutoCAD, Rhino, ANSYS Fluent, MATLAB/C++, Arduino IDE
Other: CNC, Manufacturing, Contract Analysis, Cost Estimation, CPM Scheduling, Technical Drawing, Technical Writing, Soldering
Languages: Fluent in English and Urdu

PROFESSIONAL EXPERIENCE

Computer Numerical Control (CNC) Machinist • *Twoseven Inc.* **July 2021 – Present**

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CUNY Engineering Fellow • *NYC Office of the Comptroller* **October 2020 – April 2021**

- Selected as one of 20 recent CUNY graduates to participate in the Comptroller's Fellowship program for future civic leaders
- Assisted Professional Engineers in performing cost estimations, contract, and delay analyses for heavy construction claims
- Helped with preparing, reviewing, and submitting RFIs to contractors and City agencies
- Worked with attorneys at the Bureau of Law and Adjustment to determine claim merit and recommendations for settlement
- Obtained valuable insight concerning City infrastructure, notably water supply, treatment plants, bridges, and tunnels
- Prepared and presented a research report on the impact of the COVID-19 pandemic on construction claims

Advanced Manufacturing Apprentice • *The Zahn Innovation Center* **February 2020 – May 2020**

- Fabricated prototypes and assisted in building client and in-house projects with manufacturing team
- Collaborated with assistant engineers and senior apprentices to create and revise project BOMs when necessary
- Acquired skills in laser cutting, operating manual mill and lathe, and writing G-code in HSMWorks for CNC manufacturing
- Obtained Lean Six Sigma White Belt certification and completed first part of the HAAS Basic Mill Operator certification

ACADEMIC ACTIVITIES & PROJECTS

Treasurer and Project Manager • *Women's Robotics Club | The City College of New York* **May 2019 – May 2020**

- Coordinated and led robotics workshops with the executive board
- Oversaw club budget and secured an amount of $1,500 in CCNY annual funding for project equipment and supplies
- Responsible for leading weekly collaborative Baja SAE team meetings and informing executive board about project progress

CERTIFICATIONS

FE Mechanical (EIT) • *National Council of Examiners for Engineering and Surveying* **July 2021**

PROJECTS

Designing an Untethered Hydraulic Elbow Exoskeleton **September 2019 – May 2020**

- Worked in a team of seven to design an elbow exoskeleton which used a hydraulic artificial muscle and Arduino board
- The most cost-efficient vendors were selected to purchase materials for needed parts to stay within budget of $300
- Repeated testing of final assembly of exoskeleton showed that the maximum load it could carry was 38 lbs.

Finite Element Analysis and Design Optimization of a Corkscrew Handle **March 2019 – May 2019**

- Conducted ductile corkscrew experiment to obtain approximate maximum loading points and predict failure behavior of part
- Implemented finite element analysis (FEA) on CAD model of corkscrew to analyze points of failure found at inner corners
- Von-Misses stress convergence tests were used for calculating max loads and optimization of inner corners was executed