

Afifa Nusrat

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EDUCATION

NJIT, Newark, NJ

January 2021 – August 2025

Bachelor of Science in General Engineering concentrating in Biomedical engineering

GPA: 3.25

Key Courses: Production Process Design, Engineering application of data science, Engineering for quality and reliability, Differential Equation, Cell and Biomaterial Engineering Laboratory, Biological and Chemical Foundations of Biomedical Engineering, FDA Regulation of Biomedical Devices, etc.

Skills

Tools & Platforms: AutoCAD, SolidWorks, MS Excel, Tableau, MATLAB, ImageJ, Microsoft Office, Power BI, Jupyter Notebook, ANSYS, Intro to CAD, Quality Management Systems and Python.

Technical: Statistical Analysis, CAD Modeling, Technical Writing, Experimental Design, Root Cause Analysis, Process Documentation, Protocol Development, General Troubleshooting, GMP and GLP.

Laboratory: Cell Culture, Mechanical Testing, Tensile/Compression Testing, Aseptic Technique, Design of Experiments (DoE).

Interpersonal Skills: Communication, collaboration, problem-solving, leadership, adaptability, attention to detail, negotiation, customer focus, conflict resolution, active listening.

WORK EXPERIENCE

MTF Biologics — Edison, NJ

R&D Co-op, Clinical and Pre-Clinical Affairs

January 2024 – June 2024

- Conducted detailed data analysis on immunoassays and preclinical studies, summarizing key findings using advanced Excel features and Power BI dashboards.
- Developed dynamic reporting tools to support critical business strategy and research prioritization efforts.
- Collaborated cross-functionally with research, quality, and regulatory teams to maintain compliance and support project goals.
- Benchmarked scientific methodologies against competitive and peer-reviewed standards to optimize experimental design protocols

Valley bank – Paterson, NJ

December 2021 – Present

Personal banker

- Assisted customers with setting up or closing accounts, completing loan applications, and signing up for new services.
- Promoted financial products by maintaining excellent service offering knowledge.
- Collaborated with management to strategize sales techniques, resulting in increased branch production and customer satisfaction.
- Utilized Microsoft Office applications to complete day-to-day tasks effectively.

RESEARCH EXPERIENCE/PROJECTS

NJIT – Newark, NJ

January 2021- Present

- Analyzed FDA design control regulations and documented processes for medical devices and made a mock submission for FDA approval.
- Collaborated with a team in an engineering management class to design a cost-effective dental implant using Microsoft Project, developed a design matrix, work breakdown structure, and FDA route guidance to market.
- Built a pill dispenser using Arduino and MATLAB, showcasing technical skills and problem-solving abilities.
- Cultivated mammalian cells in a sterile environment using a fluorescent microscope.
- Conducted a colorimetric protein assay using a spectrophotometer, demonstrating analytical skills.
- Executed a DNA quantitation assay using a spectrofluorometer, displaying proficiency in laboratory techniques.