MD IRFAN KHAN

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PROFILE SUMMARY

Dynamic and results-driven Mechanical Engineer with extensive experience in mechanical design, prototyping, simulation, and testing within the consumer electronics sector. Demonstrated expertise in leading cross-functional teams and driving product development from concept through to production. Seeking to contribute to a forward-thinking company with a focus on continuous innovation and professional growth.

EDUCATION

Master of Science in Mechanical Engineering *Expected: Dec 2024*
The University of Texas at Tyler, Tyler, TX | GPA 4.00/4.00

Bachelor of Science in Mechanical Engineering *Jan 2017*
Ahsanullah University of Science and Technology, Dhaka, Bangladesh | GPA 3.495/4.00

WORK EXPERIENCE

Graduate Research Assistant, The University of Texas at Tyler, Tyler, TX *Jan 2023 - Present*

- Contributed to research projects through data collection, analysis, and interpretation
- Prepared reports, manuscripts, and presentations for scientific conferences and publications

Lecturer, European University of Bangladesh, Dhaka, Bangladesh *Dec 2019 – Oct 2022*

- Developed and delivered engineering courses on advanced manufacturing and process development
- Led laboratory sessions and supervised experiments
- Organized and invigilated examinations and evaluated student performance

Mechanical Design Engineer, Walton Digi-Tech Industries Ltd., Gazipur, Bangladesh *Jun 2017 – Nov 2019*

- Led cross-functional teams in product and process development using tools such as Six Sigma, Statistical Process Control (SPC), Design of Experiments (DOE), Root cause analysis
- Developed 20+ conceptual models and utilized DFM principles for product development
- Created 20+ prototypes using additive manufacturing techniques (SLA, FDM)
- Performed engineering calculations related to sizing, performance, tolerance analysis, and assembly
- Collaborated with a team of engineers for machinery sourcing for production and R&D
- Enhanced product quality and reduced production time by designing jigs for the assembly line
- Designed corrugated packaging solutions for consumer electronics products

CERTIFICATION

Semiconductor Fabrication 101 *2024*
Issuing Organization: Purdue University, University of Texas at Austin, and Intel Corporation

Mechanical Design at the Level of Professional *2021*
Issuing Organization: Dassault Systems

Additive Manufacturing at the Level of Associate *2020*
Issuing Organization: Dassault Systems

The Elements of AI *2019*
Issuing Organization: University of Helsinki

TECHNICAL

- CAD Tools: SolidWorks, AutoCAD, CATIA
- CAM Tools: HSMWorks, SolidCAM
- Simulation Tools: ANSYS, CMG, Tecnomatix
- Programming Skills: MATLAB, Python
- Documentation and Presentation: Office Suite
- Microcontrollers: Arduino

AWARDS

- 3rd place (Graduate Poster Presentation) at the East Texas Research Conference Showcase *(2024)*
- 3rd place (Graduate Poster Presentation) at the 8th annual Lyceum Research Showcase *(2023)*
- 2nd place at the business model competition by East Texas Entrepreneurship Center *(2023)*

PROJECTS

- **Touchless Door-Opener Key Ring:** Designed in Fusion 360 and fabricated with an FDM printer during COVID-19 to minimize contact with door handles *(2020)*
- **Robotic Arm Gripper:** Designed in SolidWorks and built with the laser cutter and 3D printer *(2017)*
- **Power Transmission System of All Wheel Drive Car:** Designed in SolidWorks and utilized lathe, milling, and Arc welding machine for fabrication *(2015)*