

ZARIN TASNIM

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CAREER OBJECTIVE

Motivated Ph.D. student in the Wang Materials Group at UT Austin specializing in computational materials science, aiming to advance data-driven discovery of next-generation materials. I seek to contribute impactful research at the intersection of simulation, theory, and materials innovation.

RESEARCH INTERESTS

2D Materials | Electrochemistry | Quantum Computing

EDUCATION

M.Sc. in Materials Science and Engineering (Ongoing) | GPA 3.86/4.00

University of Texas at Austin, USA

January 2025 – Present

Courses Taken:

- Introduction to Solid State Properties of Materials
- Computational Materials Science & Engineering
- Additive Manufacturing
- Introduction to Thermodynamics of Materials
- Structure of Materials
- Introduction to Phase Transformations
- Quantum Mechanics I

B.Sc. in Materials Science and Engineering | CGPA 3.25/4.00

Khulna University of Engineering and Technology, Khulna, Bangladesh

Awarded March 2022

Thesis: Organic Photovoltaic Simulation using GPVDM

RESEARCH EXPERIENCE

Graduate Research Assistant

- Focusing on defect physics and materials design in TMDs and other two-dimensional materials using computational methods.

January 2026 – Present

Supervisor: Dr Wennie Wang,

Assistant Professor, McKetta Department of Chemical Engineering, UT Austin

Co-Supervisor: Dr Deji Akinwande,

Professor, Chandra Department of ECE, UT Austin

Volunteer Researcher

September 2024

Integrated Nano Computing (INC) Laboratory

- Helped in the project of **Magnetic Tunnel Junctions** with **anti-ferromagnetic materials**, working in the clean room of the Microelectronics Research Centre

Principal Investigator: Dr Jean Anne Incorvia,

Associate Professor, Chandra Department of ECE, UT Austin

Undergraduate Research Assistant

January 2020 – December 2021

The Photonics Research Group ([Website](#))

Department of Electrical and Electronics Engineering (EEE),

Khulna University of Engineering and Technology, Khulna, Bangladesh

Research Supervisor: Prof. Md. Jahirul Islam, Department of EEE, KUET.

Project(s) Completed: Performance of Organic Photovoltaic Cells incorporating different interlayers

[\[Publication\]](#)

PUBLICATIONS

Conference Proceedings

- [Zarin Tasnim](#), Md Jahirul Islam, Md Rejvi Kaysir (2021). Effect of Interlayers on the Performance of Organic Photovoltaic Cells. Published in: *2021 5th International Conference on Electrical Information and Communication Technology (EICT)*, 17-19 December 2021, INSPEC Accession Number: 21682837, Electronic ISBN: 978-1-6654-0906-3, DOI: 10.1109/EICT54103.2021.9733519

Thesis

- Zarin Tasnim (2022). Effect of Interlayers on the Performance of Organic Solar Cells. BSc thesis, Khulna University of Engineering and Technology (KUET), Khulna-1000.

TECHNICAL SKILLS

Simulation and Analysis

- Visualization for Electronic and Structural Analysis (VESTA)
- HighScore Plus - XRD Analysis Software (A comprehensive tool for crystallographic analysis)
- LAMMPS Molecular Dynamics Simulator
- VASP (Vienna Ab initio Simulation Package)
- Quantum Espresso
- OVITO

Programming

- Python
- C
- C++

ACHIEVEMENTS

2nd Runner-up

At the National level, the Speak Out for Engineering (SOfe) competition, arranged by the Institution of Mechanical Engineers, IMechE.

1st Runner-up

Engineering Poster Presentation Competition, Technival, Inter-University Tech Competition, arranged by the Department of Electronics and Communication Engineering, KUET.

2nd Runner-up

Engineering Poster Presentation Competition, IGNITION-Inter University Tech Competition, arranged by the Department of Mechanical Engineering, KUET.

INDUSTRY AND LEADERSHIP EXPERIENCES

Ethics and Compliance Expert

Grameenphone, Dhaka, Bangladesh

- Maintained regulatory compliance of all the stakeholders and business partners of Grameenphone, and managed the relevant policies of the company

*August 2023 –
July 2024*

Cluster Manager

Grameenphone, Dhaka, Bangladesh

- Looked over a business cluster consisting of two distribution houses and managed a team of 30 field forces with a business volume of 3 crore BDT per month

*Nov 2022 – July
2023*

Management Trainee – Next Business Leader

Grameenphone, Dhaka, Bangladesh

- Looked over a business territory consisting of 20 field forces with a business volume of 1.9 crore BDT per month

*Dec 2021 – Oct
2022*

Community Development Executive (Part-time)

Agami Limited, Dhaka, Bangladesh

- Created a loyalty-based platform for a retail-based e-commerce to keep customers loyal to the platform

*April 2021 – Nov
2021*

Intern

British American Tobacco (BAT) Bangladesh, Dhaka, Bangladesh

- Worked for the new e-commerce venture of BAT Bangladesh

*Oct 2020 – Mar
2021*

General Secretary | KUET Career Club

Khulna University of Engineering and Technology, Khulna, Bangladesh

- Organized more than 20 career counselling and skill development workshops related to engineering job sectors and higher studies

Session 2020–21