

# **Nishant Mishra**

## Research Engineer

Adaptable Research Engineer at the Universit of Twente with experience working in international, interdisciplinary teams demonstrating a structured, stakeholder oriented approach to solving complex microfabrication challenges.

### **Professional Experience**

University of Twente, XUV Optics group | Research Engineer | Piezoelectric Thin Films | 14AMI EU project Jul 2023 - Present

- Thin film deposition, cleanroom patterning, characterization
- Process documentation and creating SOPs
- Commisioning, maintanance and upgrades of research setups

**About Me** 

Twente Pathway College | Teacher- Physics, Module Coordinator- Computer Science, Project 3

Sep 2021 - Jun 2023

- Organization and coordination for the course 'Computer Science'
- · Instruction, assessment, and curriculum development
- Project design and supervison

ECsens (now OccamDx) | Research Intern

Jul 2020 - Dec 2020

- · Semiconductor mask design
- Electrochemical experiments
- Data analysis

CARE, IIT-Delhi | Research Intern

Jun 2017 - Sept 2019

- · Biomemristor fabrication
- Electrical Characterization of bio-FET, EIS, and Memristive Devices
- · Data analysis

#### **Publications**

Vancomycin functionalized WO3 thin film-based 2019 impedance sensor for efficient capture and highly selective detection of Gram-positive bacteria

MoS2/TiO2 Hybrid Nanostructure-Based Field-Effect 2019 Transistor for Highly Sensitive, Selective, and Rapid <u>Detection of Gram-Positive Bacteria</u>

#### **Awards**

2021 FOBOS Activism grant for being in a part time board 2020 FOBOS Activism grant for being in a part time board

#### Contact

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#### **Hard Skills**

- X-ray Diffraction
- · Atomic Force Microscopy
- Mask design, process planing and cleanroom processing
- Programming: Python, MATLAB, C++
- Electrical characterization
- Basic chemical lab skills
- RF Magnetron Sputtering
- · White light interferometry
- · 3D Printing

### **Soft Skills**

- English (C1), Dutch (B1)
- · Cross-Disciplinary and Intercultural Communication
- · Analytical Problem Solving
- Strategic Presentation and stakeholder awareness
- · Self-driven and adaptable

#### **Education**

Electrical Engineering (M.Sc.)

University of Twente, Enschede

Sep 2019 - Aug 2021

- Specialization: Lab on a Chip systems
- · Thesis link here
- Research Honours graduate

Electrical and Electronics Engineering (B.Tech.) - First Division

GGSIPU, Delhi

Aug 2014 - May 2018