

Curriculum vitae

PERSONAL INFORMATION

Nishant Mishra

 New Delhi (India)

 nishant-mishra.com

EDUCATION AND TRAINING

Aug 2014–May 2018	Bachelor's of Technology in Electrical and Electronics Engineering EQF level 6 Guru Tegh Bahadur Institute of Technology (affiliated with Guru Gobind Singh Indraprastha University), New Delhi (India)
2013–2014	All India Senior School Certificate Examination EQF level 4 Delhi Public School, R. K. Puram, New Delhi (India) Mathematics, Physics, Chemistry, Computer Science, English
2011–2012	All India Secondary School Certificate EQF level 2 Delhi Public School, R. K. Puram, New Delhi (India) Mathematics, Science, Social Studies, Computer Science, English, Hindi
Feb 2019	Primer on Semiconductor Fundamentals (MOOC) (Audit) Purdue University (EdX), West Lafayette (United States)
Jun 2018	Nanotechnology for Health (MOOC) University of Twente (FutureLearn), Enschede (Netherlands)
Dec 2017	Device Characterization with the Keithley 4200-SCS (MOOC) (Audit) Keithley Instruments, Inc (Nanohub), Cleveland (United States)
Feb 2017	Micro & Nano fabrication (MEMS) (MOOC) École Polytechnique Fédérale de Lausanne (EdX), Lausanne (Switzerland)
Nov 2018	Circuits and Electronics 1: Basic Circuit Analysis (MOOC) Massachusetts Institute of Technology (EdX), Cambridge (United States)
Sep 2016	The Arduino Platform & C Programming (MOOC) University of California, Irvine (Coursera), Irvine (United States)

WORK EXPERIENCE

Dec 2017–Present Research Intern

Indian Institute of Technology Delhi, New Delhi (India)

- Characterized a Bioimpedance sensor for bacteria detection
- Fabricating and characterizing a Polysaccharide-based Resistive memory device on a flexible substrate
- Characterizing a BioFET sensor for bacteria detection

- 1 Jun 2017–1 Aug 2017 **Research Intern**
Indian Institute of Technology Delhi, New Delhi (India)
Fabricated and characterized a Protein-based Resistive memory device on a flexible substrate
- Aug 2016–Dec 2017 **Member, Electronics Club GTBIT**
IEEE GTBIT, New Delhi (India)
 - Conducted an academic-industry workshop on Renewable Energy resources
 - Conducted a two day hardware hackathon
- Aug 2015–Aug 2016 **Member, IEEE**
IEEE GTBIT, Delhi (India)
 - Taught a Special Interest Group on basics of C
 - Conducted a quiz titled "TechQuIEEZ" on IEEE Day 2015
 - Conducted mock Group Discussions and Personal Interviews on IEEE Day 2015

PERSONAL SKILLS

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Test of English as a Foreign Language (TOEFL)					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Job-related skills

- Physical Vapour Deposition** using Varian 3117 Thermal evaporator
- Semiconductor characterization** using Keithley 4200 and 4200A parameter analyzers. Experience with Keithley 2636B, Keithley 2400 SMUs
- Electrochemical Impedance Spectroscopy** using BioLogic SP-150 Potentiostat
- Mask designing** using ProjeCAD and IntelliCAD
- Data analysis and plotting** using Origin 2019
- Infrared Spectrum analysis** using Thermo Scientific Nicolet iN10MX infrared imaging microscope
- UV-Vis Spectrum analysis** using Eppendorf Biospectrometer
- Silver Nanoparticle Synthesis** using chemical & biological synthesis
- Basic Object Oriented Programming** using C++

ADDITIONAL INFORMATION

Publications

Vancomycin functionalized WO₃ thin film-based impedance sensor for efficient capture and highly selective detection of Gram-positive bacteria
Biosensors and Bioelectronics
<https://doi.org/10.1016/j.bios.2019.04.029>

Conferences

Reconstituted Fe-Azurin based device for resistive memory switching
Submitted extended abstract to the International Workshop on the Physics of Semiconductor Devices, 2017

Honours and awards

- March 2016- Second Place in Tesla Turbulence -IEEE GTBIT: Quiz on hardware, networking, electronics, boolean algebra, and PC assembly
- 2010-2012- Second Green Badge for academic excellence for two consecutive years - Delhi Public School, R.K. Puram
- 2006-2009- Scholar Badge for academic excellence for three consecutive years - Delhi Public School, R.K. Puram