

Akash Roy

PhD Scholar | Full Stack Developer | Experienced Educator
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EDUCATION

UNI. OF SOUTHERN CALI.

PHD IN ELECTRICAL ENGINEERING
Ongoing | Los Angeles, USA

HERITAGE INSTITUTE OF TECH.

BTECH IN ELECTRONICS AND
COMMUNICATIONS
May 2019 | Kolkata, IND
Cum. GPA: 9.51 / 10.00

SOUTH POINT HIGH SCHOOL

PURE SCIENCE
Grad. May 2015 | Kolkata, India
Percentage: 87.5

LINKS

Github:// [aroy97](#)
LinkedIn:// [aroy97](#)
Website:// [Akash Roy](#)

SKILLS

ELECTRONICS

Silvaco • Verilog • Tanner • Arduino
Device Modelling

PROGRAMMING

Over 5000 lines:
Angular 6 • Python • C++ • C
Over 2000 lines:
C • C++ • CSS • HTML •

Familiar:

MongoDB • MySQL
ReactJS • ExpressJS

CERTIFICATIONS

- Python For Everybody - Specialization Certification ID: EA8X4B7W4EEH
- An Introduction to Programming the Internet of Things (IOT) - Specialization Certification ID: WX24MU7L2RLC
- Web Design for Everybody: Basics of Web Development and Coding Certification ID: DSP9J2LCL2WG

PROJECTS

- SunChargers - A Solar Powered Smart Street Lighting System
- Crowd Safe - A Crowdsourced App for safety during the Coronavirus
- CoronaBot - A Chatbot deployed on Whatsapp providing Coronavirus live updates
- 8-bit Microprocessor Design
- Bio-Sensor Modelling using Silvaco

EXPERIENCE

TATA CONSULTANCY SERVICES LIMITED | SYSTEMS ENGINEER

Jun 2019 - Dec 2020 | Kolkata, IND

- Full-Stack Developer - Developed and tested code for Angular 6 and Flask.
- Wrote Unit and Selenium Tests for Front End and Unit and Behave Tests for Backend.

ELECTRONICS CENTRE OF EXCELLENCE | VLSI TRAINEE

Jun 2018 - Jul 2018 | Bhubaneswar, IND

- Got familiarized with industry level Verilog and Tanner

UNACADEMY | ELECTRONICS EDUCATOR

Apr 2018 - Jun 2018 | Kolkata, IND

- Created 1000+ minutes of online teaching content.
- Generated over 68000 minutes of watch-time.

POSITIONS

IEEE HITK STUDENT BRANCH | BRANCH CHAIR

Jan 2017 - Jan 2019 | Kolkata, IND

Led my team of over 30 enthusiastic IEEE members to organize events for developing the culture of technology in our college.

RESEARCH

IEEE EDS COE LAB | RESEARCHER

Jan 2017 - Mar 2020 | Kolkata, IND

Worked with **Dr. Atanu Kundu** to study **DG-MOSHEMT**, a nanodevice which has the advantages of both MOS and HEMT.

AWARDS

2020	TCS	Applause and On The Spot Award
2020	National	Top 350/6000 in Covid 19 Hackathon
2020	3 rd	Bronze Medalist in ECE Department (Undergraduate)
2019	State	IEEE Best Student Volunteer (Kolkata Section)
2019	National	Sankalp Semiconductors Hackathon Finalist
2018	Global	Judges' Favourite in Agorize and Capgemini Global Hackathon
2018	4 th /51	BIT Mesra Hacka-Bit

PUBLICATIONS

- [1] R. Mitra, A. Roy, A. Kundu, and M. Kar. Impact of algan doping concentration on the analog/rf performance of a double gate underlap n-algan/gan moshemt. *International Symposium on Devices, Circuits and Systems*, 2020.
- [2] A. Mondal, S. Ghosh, A. Roy, M. Kar, and A. Kundu. Effect of doped algan width variation on analog performance of dual gate underlap mos-hemt. *IEEE Calcutta Conference (CALCON)*, 2020.
- [3] A. Mondal, A. Roy, R. Mitra, and A. Kundu. Comparative study of variations in gate oxide material of a novel underlap dg mos-hemt for analog/rf and high power applications. *Springer Silicon*, 2019.
- [4] A. Roy, R. Mitra, and A. Kundu. Influence of channel thickness on analog and rf performance enhancement of an underlap dg algan/gan based mos-hemt device. *Devices for Integrated Circuit (DevIC)*, 2019.