

KARTIK MATHUR

Graduate Engineer, Electronics and Communication Engineering

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WORK EXPERIENCE

NXP Semiconductors

Design Engineer

July 2019 – Present Noida, Uttar Pradesh

- Complete ownership of Secure Boot Assist Firmware Verification and Validation for Automotive SoCs.
- Focus on maximum re-use and automation while targeting zero bugs.
- Quick ramp-up time on new NPIs, performed Day 1 Bring-up at NXP Glasgow site and assisted other teams for crucial customer demo.

Weave Lab, IIIT Delhi

Undergraduate Student Researcher

January 2018 – July 2019 New Delhi, Delhi

- Worked on my Bachelor's Thesis titled: Designing Wearables, Trinkets and Toolkits under the guidance of Dr. Aman Parnami.
- Successfully completed 3 different projects in the field of wearable computing, construction toolkits and digital storytelling.
- Our research was published as research articles at reputed conferences in 2019.

EDUCATION

Bachelor of Technology, Electronics and Communication Engineering

Indraprastha Institute of Information Technology, Delhi (IIIT Delhi)

August 2015 – July 2019 Delhi, India

- Graduation CGPA: 7.53/10.00
- Bachelor's Thesis Title: Designing Wearables, Trinkets and Toolkits
- Thesis Advisor: Dr. Aman Parnami
- Relevant Coursework: Computer Architecture, Operating Systems, Embedded Logic Design, Machine Learning,

ACHIEVEMENTS

Spot Award presented by NXP India Country Manager

January 2020 NXP Semiconductors

- I was awarded by NXP India Country Manager in recognition of my Day 1 Bring-up enablement at NXP Glasgow site.

Publications

2019 Weave Lab, IIIT Delhi

- Jatin Arora, Kartik Mathur, Aryan Saini, and Aman Parnami. 2019. Gehna: Exploring the Design Space of Jewelry as an Input Modality. Published in proceedings of ACM CHI 2019. DOI: <https://doi.org/10.1145/3290605.3300751>
- Jatin Arora, Kartik Mathur, Manvi Goel, Piyush Kumar, Abhijeet Mishra, and Aman Parnami. 2019. Design and Evaluation of DIO Construction Toolkit for Co-making Shared Constructions. Published in proceedings of ACM IMWUT (December 2019). DOI: <https://doi.org/10.1145/3369833>
- Aryan Saini, Kartik Mathur, Abhinav Thukral, Nishtha Singhal, and Aman Parnami. 2019. Aesop: Authoring Engaging Digital Storytelling Experiences. Adjunct publication of ACM UIST '19. DOI: <https://doi.org/10.1145/3332167.3357114>

PERSONAL STATEMENT

I am a strong professional with demonstrated history of working as an engineer in the semiconductor industry and as a researcher in the field of HCI. I am a team player with excellent communication skills and always focus on doing innovative things.

SKILLS

Prototyping

- Interfacing with microcontrollers
- Communication protocols (SPI, I2C, LIN, CAN, BLE)
- PCB Fabrication

Soft tools and Frameworks

Git MATLAB OpenCV Unity
Lauterbach - Trace 32 for JTAG Debugger
Adobe Creative Suite

Programming Languages

C/C++/C# Python JavaScript