

# Arnav Kumar

Human-Computer Interaction & Network Security Enthusiast  
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## EDUCATION

### IIIT DELHI

B.TECH

Computer Science And Engineering  
2016 - 2020 (expected)  
CGPA: 7.73 / 10 (Till 5th Semester)

### APEEJAY SCHOOL PITAMPURA, NEW DELHI

CENTRAL BOARD OF SECONDARY  
EDUCATION (CBSE)  
(2014 - 2016)  
Percentage: 87.6%

## SKILLS

### LANGUAGES

Java • C • C++ • Python • HTML5  
CSS3 • Bash Scripting

### TOOLS

Django • Adobe Photoshop •  
Unity • Wordpress • MySQL •  
CUDA • Netfilter • Blender

## LINKS

Github://arnavpiscs  
LinkedIn://in/thisisak  
Twitter://@This\_Is\_Arnab  
Medium://@thisisarnav

## ACHIEVEMENTS

- Winner: Byld Hackathon 2018
- Runner Up: Hack Junction 2018 -  
Track: Smart Cloud  
Challenge: Saved By IoT

## POSITIONS of RESPONSIBILITY

### STUDENT MENTORSHIP PROGRAM

Mentor | May 2018 - Present

### PHILOSOC (PHILOSOPHY SOCIETY)

Coordinator | Jan 2018 - Present

### DESIGN 360 (DESIGNATHON)

Lead Organizer | June 2017 - Aug 2017

### IIITD - MUN

Organizer | Jan 2017 - Mar 2017

### TEDxIIITD

Website Manager | Nov 2018 - Present

### STUDENT COUNCIL

Member | Aug 2016 - Apr 2017

## EXPERIENCE

RESEARCH INTERN | May 2018 - Present

### WEAVE LAB - IIITD

Advisor: Prof. Aman Parnami

- Currently working on Braille OTG (On-The-Go) : a Portable wear-able through which non-sighted people can read/write while on the move or in a compact situation, as part of the Human-Centered Design Department at IIITD
- Visited blind schools and conducted user studies to get a better insight on the positioning of the wearable and the feasible domains of usage for it.

SUMMER INTERN | May 2017 - July 2017

### SWARATH - IIITD

Advisor: Prof. Saket Anand, Prof. Sanjit Kaul

- Worked on IIITD's Autonomous Car on Estimating & Following Straight Paths as part of the Infosys Centre for Artificial Intelligence at IIITD.
- Developed Swarath's website.

## PROJECTS

GPU BASED STATELESS FIREWALL | May 2018 - Present

(Undergraduate Thesis)

Advisor: Prof. Sambuddho Chakravarty, Prof. Ojaswa Sharma

- Currently developing practical infrastructure for stateless firewall that is accelerate-able using a GPGPU, in order to achieve drastic improvements in speed in packet filtering and firewalling, as part of Cybersecurity Education and Research Centre (CERC), IIIT-Delhi.
- Using a multi disciplinary approach with tools like CUDA for parallel computation in addition to a modified version of Netfilter to achieve functionalities like NAT and packet filtering.

VAYU (MULTI PURPOSE DRONE) | Jan 2017 - Apr 2017

Advisor: Prof. Alexander Fell

- Made a multi-purpose drone which can be used to detect broken roads and garbage and to deliver ration and first aid in inaccessible locations.
- Was made to support payloads of up to 2 kilograms.

GrooveInfo - CHATBOT USING OWL | Oct 2018 - Nov 2018

Advisor: Prof. V. Raghava Mutharaju

- Using the Web Ontology Language, developed a chat bot which provides answers to questions related to songs.
- Used Protege to define the ontologies and the OWL API for integration with the chat bot application.

SECURE BANKING SYSTEM | Aug 2018 - Nov 2018

Advisor: Prof. Arun Balaji Buduru

- Developed a Django web application for a secure banking system with support for various types of users (employees & customers).
- Provides security to threats like XSS, CSRF, DOS and code injection attacks (SQL Injection).