# Arnav Kumar

Human-Computer Interaction & Network Security Enthusiast arnav16017@iiitd.ac.in | +91 98685 38952

## **EDUCATION**

### **IIIT DELHI**

**B.TECH** 

Computer Science And Engineering 2016 - 2020 (expected) CGPA: 7.37 / 10 (Till 4th 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://arnavpisces LinkedIn://in/thisisak Twitter://@This\_Is\_Arnav Medium://@thisisarnav

## **ACHIEVEMENTS**

- Winner: Byld Hackathon 2018
- Runner Up: Hack Junction 2018 -Track: Smart Cloud

# 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 wearable 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 Cybersecuity 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).