# Saksham Chitkara

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# **FDUCATION**

## **CARNEGIE MELLON UNIVERSITY**

Masters of Science, Information Security August 2017 - May 2019 | Pittsburgh, PA Information Networking Institute

## COURSEWORK FOR 2016-2017

Audited as a Research Associate 08-840 Green Computing 08-735 User-Focused Sensing Systems

## **COURSEWORK FOR FALL 2017**

15-513 Introduction to Computer Systems 08-736 Ubiquitous Computing 18-730 Introduction to Computer Security 10-601 Introduction to Machine Learning

#### **COURSEWORK FOR SPRING 2018**

15-640 Distributed Systems 15-624 Cyber-Physical Systems 18-732 Secure Software Systems 14-819 Reverse Software Engineering

## **SRM UNIVERSITY**

Bachelors of Technology,

Computer Science
September 2017 - June 2018 | Chennai, India
College of Engineering
GPA: 4.0 / 4.0

# SKILLS

## **Programming and Scripting Languages**

Java • Python • C

C++ • Matlab • Go • Assembly • HTML/CSS

### **Tools and Frameworks**

Android • Django Framework Git • Vim • Shell Scripts • LATEX

# CONFERENCES

- First Author Publication at Ubicomp 2017 Why Does this App Need My Location?
- Featured Paper (5 in 100+ Published Papers)
- Conference Acceptance Rate < 20%
- CMU CyLab Conference 2017
- Poster Presentation ProtectMyPrivacy
- DARPA Project Presentation 2017
- Privacy-Enhanced Android
- CMU Privacy Day 2017
- Poster Presentation PrivacyProxy

# **EXPERIENCE**

## CARNEGIE MELLON UNIVERSITY | Research Associate

Jan 2016 - June 2017 | Pittsburgh, PA

- Lead a 5 person CMU team to manage 3 DARPA funded projects on improving the privacy and security of Android. Worked in collaboration with teams from UC Berkeley, Cornell and UC Irvine.
- Constructed an all-encompassing purpose taxonomy for private data accesses on smartphones and enforced data transmission to apps on the basis of purpose of data accesses.

# **DELL INC** | Software Engineering Intern

Summer 2014 | Chennai, India

• Wrote scripts to perform security automation and testing.

# RESEARCH

## WHY DOES THIS APP NEED MY LOCATION?

First Author Publication at Ubicomp 2017 | Featured Paper (Top 5%) Systems + Mobile Security | Jan 2016 - Aug 2017

- Designed and built a Context-Aware library based permission model for Android which lead to 25% better protection and 30% reduced user decisions while telling the users the purpose of PII access.
- https://dl.acm.org/citation.cfm?doid=3139486.3132029

## PRIVACY PROXY | CHIMPS Lab + Synergy Lab, CMU

Aug 2016 - Aug 2017 | Systems + Network Security

- Detect and filter the Personally Identifiable Information (PII) of the users by analyzing the network traffic of the crowd.
- https://arxiv.org/pdf/1708.06384.pdf

# **PROJECTS**

## **BIO ACOUSTIC SENSING**

Aug 2017 - present | Wearable Systems

- Modify the wearable devices to transmit the accelerometer data at an increased rate.
- Capture the bio acoustic feedback from accelerometer data to do activity recognition.

## PROTECT MY PRIVACY | Synergy Lab, CMU

Jan 2016 - Aug 2017 | Systems + Security | 30,000+ downloads

- Built an end-to-end app, which collects, enforces and transmits the user's privacy decisions.
- Designed and implemented a Firewall which blocks Wifi and mobile data on a per app basis by interacting with the Android Kernel.

# **AWARDS**

- Prabhu and Poonam Pandey Fellowship, (1 of 34 students in MSIS 2017) @ Information Networking Institute, Carnegie Mellon University
- Research Fellowship, @ Carnegie Mellon University
- Best Project Award (Plagiarism Detector Project), @ SRM University
- India's Best Brains, National Level Hackathon, Rank 3/3700