

# Saksham Chitkara

sakshamchitkara12@cmu.edu | (412) 557-1059

<http://www.contrib.andrew.cmu.edu/~schitkar/> | [Github://saksham12](https://github.com/saksham12) | [LinkedIn://saksham-chitkara](https://www.linkedin.com/in/saksham-chitkara)

## EDUCATION

### CARNEGIE MELLON UNIVERSITY

Masters of Science,  
Information Security

Aug 2017 - Dec 2018 | Pittsburgh, PA  
Information Networking Institute  
Scholarship Recipient - 2017

### SRM UNIVERSITY

Bachelors of Technology in  
Computer Science

June 2016 | Chennai, India  
College of Engineering  
GPA: 4.0 / 4.0

## COURSEWORK

### GRADUATE

Ubiquitous Computing\* (08-736)  
Computer Systems\* (18-600)  
Computer Security\* (18-730)  
Machine Learning\* (10-601)

### GRADUATE - AUDITED

Green Computing (08-840)  
Building User-Focused  
Sensing Systems (08-735)

## SKILLS

Good:

Java • Python • C  
Android • Django Framework  
MySQL • Git • Vim • Shell Scripts

Familiar:

C++ • Matlab • Go • Assembly  
HTML/CSS •  $\text{\LaTeX}$

## LANGUAGES

English - Academic Proficiency  
Hindi - Native Speaker

## AWARDS

- INI Fellowship, (2 of 150 students)  
@ Carnegie Mellon University
- Research Fellow,  
@ Carnegie Mellon University
- Best Project Award,  
@ SRM University
- India's Best Brains, Rank 3/3700

## EXPERIENCE

### CARNEGIE MELLON UNIVERSITY | Research Associate

Jan 2016 – June 2017 | Pittsburgh, PA

- Lead a 5 person CMU team to manage a DARPA funded project (Privacy Enhanced Android) on improving the privacy and security of Android. Worked in collaboration with teams from UC Berkeley, Cornell and UC Irvine.

### DELL INC | Software Engineering Intern

Summer 2014 | Chennai, India

- Wrote scripts to perform security automation and testing. All code was reviewed, perfected, and pushed to production.

## RESEARCH

### CONTEXT-AWARE PRIVACY MANAGEMENT | Synergy Lab, CMU

First Author Publication at ACM - IMWUT (UbiComp) 2017 | Android, Python

- Designed and built a Context-Aware library based permission model for Android which lead to 25% better protection and 30% reduced user decisions.
- [http://www.synergylabs.org/yuvraj/docs/Chitkara\\_UbiComp2017\\_ContextAwarePrivacy.pdf](http://www.synergylabs.org/yuvraj/docs/Chitkara_UbiComp2017_ContextAwarePrivacy.pdf)

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

Technical Report Published | Aug 2016 – Aug 2017 | Android, Go, MySQL

- An app for unmodified android devices to detect Personally Identifiable Information (PII) by analyzing the network traffic of the crowd.
- Designed and implemented a Privacy-sensitive system which intelligently filters the PII before it leaves the device.
- <https://arxiv.org/pdf/1708.06384.pdf>

## PROJECTS

### PROTECT MY PRIVACY | Synergy Lab, CMU

Jan 2016 – Aug 2017 | Pittsburgh, PA | Android, C, Python, Django, MySQL | 30,000+ downloads

- Built an end-to-end app, which collects a user's privacy decisions, enforces them at the OS level. Built a service to collect and periodically transmit the decisions.
- Designed and implemented a Firewall which blocks Wifi and mobile data on a per app basis by interacting with the Android Kernel.

### PRIVACY ENHANCED ANDROID | CHIMPS Lab + Synergy Lab, CMU

Jan 2017 – Aug 2017 | Pittsburgh, PA

- Constructed an all-encompassing purpose taxonomy for private data access on smartphones and separate out private data access on the basis of the purpose.
- Enforced data transmission to apps on the basis of data-usage purposes.

### POP ON 7 | SDC Lab, SRM

Jan 2015 – July 2015 | Chennai, India | Android

- A published Android app, based around mathematics puzzles. Worked with Animations, UI and data collection.

### PLAGIARISM DETECTOR | SDC Lab, SRM

June 2014 – Dec 2014 | Chennai, India | Python

- Detected Plagiarism in text files by using a n-grams approach.