



+1-541-745-9868
akshith.573@gmail.com
akshithg.github.io
akshith_g

Akshith Gunasekaran

Education

PhD in CS, *Oregon State University*, Corvallis. **expected 2022**

Area of Focus: System Security, Applied Cryptography, AI

Advisors: Rakesh Bobba, Yeongjin Jang

Coursework: CS Theory (algorithms, graph theory), Security (operating systems, system security, cryptography), AI (artificial intelligence)

BTech in CS, *SRM University*, Chennai. **2012 - 2016**

Activities: ABU Asia-Pacific Robot Contest, Knowledge Based Search Engine

Venture: Simpl, a fintech startup.

Publication

Multi-K: Kernel multiplexing framework. **2020**

A framework for multiplexing multiple specialized kernels for attack surface reduction.

Supported by the Office of Naval Research (ONR)

Balancing Image Privacy and Usability with Thumbnail-Preserving Encryption. **2019**

Accepted at **NDSS 2019**. photoencryption.org

Work

Intern - MIT Media Lab, Human Dynamics Group. **2017**

Mentor: Dazza Greenwood

Prototyped applications for using blockchain as a source of self-sovereign identity.

Tools: Node, Ethereum, web3.js, TravisCI

Software Developer, Simpl. **2015 - 2017**

Built the first MVP and onboarded 5k users to raise a seed capital of 2M\$.

Scaled the service using an event based pub-sub microservice architecture.

Built the data engineering pipeline, for Business Intelligence queries.

Tools: Ruby on Rails, Python, Redis, Kafka, RabbitMQ, Spark, Cassandra.

Activities

CTF Team, *OSUSEC*.

Shadow Program Committee, *IEEE Security and Privacy*. **2020**

External Reviewer, *ACM Conference on Computer and Communications Security*. **2019**

External Reviewer, *IEEE Real-Time and Embedded Technology and Applications Symposium*. **2019**

External Reviewer, *IEEE International Conference on Dependable Systems and Network*. **2019**

Teaching Assistant, *CS290 Web Technologies and Web Security*. **2018**