# VIKram Shanker Computer Engineering - Carnegie Mellon University

#### Contact

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## programming

- ⋆ Java
- ⋆ Python
- ⋆ C

SML

**ETEX** 

MySQL

x86-64 Assembly

HTML/CSS

## Version Control, Platforms, & Frameworks

- ⋆ Android
- ⋆ Django
- ⋆ \*nix,
- ★ Git

Mac OS X

#### Relevant Coursework

- Introduction to Computer Systems
- Structure and Design of Digital Systems
- Principles of Imperative Computation
- Principles of Functional Programming
- Green Computing
- Introduction to
   Electrical and
   Computer Engineering

## Languages

English - Fluent Tamil - Fluent Spanish - Fluent

## **Education**

#### **B.S. Electrical and Computer Engineering**

Minor in Computer Science GPA: 3.89/4.0

Carnegie Mellon University

May 2018

# **Experience**

#### **Software Research Assistant**

SynergyLabs, Carnegie Mellon University

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Summer 2015

- Develop frontend as well as backend for ProtectMyPrivacy(PMP), a privacy protection Android application that allows users to protect the personal information on their Android device.
- Dynamically identify the source of requests for private information and determine whether to grant other applications access, no access, or access to fake information using techniques such as reflection and callbacks.
- Fully create and develop a third party-library-separation feature, in which requests for private information made by third-party-libraries are distinguished from requests made by the application, despite Android operating system making no distinction.
- Write HTTP client-server communications to transmit data on decisions made to the server.
- Develop the backend to store new information collected using Django Framework and MySQL databases.
- Update the PMP Android website using RapidWeaver + Stacks and host it on Apache. (www.android.protectmyprivacy.org)

#### **Teaching Assistant, Fundamentals of Computer Science (15-112)**

Spring 2015

School of Computer Science, Carnegie Mellon University

- Teach introductory to intermediate programming in Python, covering control flow, recursion, object oriented programming, efficiency, and more.
- Lead recitation and course-wide review sessions, hold office hours, and grade homework, quizzes, and exams.
- Write practice exams, guizzes, and assist students in all academic needs.

#### **Resident Assistant, First-Year Housing**

2015 - 2016

Stever House, Carnegie Mellon University

- Develop a positive living environment designed to link community, faculty, and residents.
- Create and facilitate student-centered residence programs to promote personal growth.
- Enforce all University Housing policies.

# **Campus involvement**

Member - Institute for Electronic and Electrical Engineers 2015-Present
President - Club Tennis 2014-Present

# **Awards**

Dean's List, College of Engineering

National Merit Scholar

American Mathematics Competition, School Champion

2012-2013