# Parul Sohal

Resume

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#### Education

2017-Present Boston University, Boston, MA, PhD in Computer Science, Advisor: Prof. Orran Krieger.

2013–2017 Lewis & Clark College, Portland, OR, Bachelors of Arts, GPA:3.705.

Skills & Abilities

Languages C, JAVA, PYTHON, X86

Experience Linux Kernel Programming, Android Programming

Research Interests

Real-Time Systems.

Partially Programmable Hardware.

Unikernels.

## Projects

#### Current Memory Bandwidth Allocation.

Creating a theoretical model that will determine a policy for allocating memory bandwidth to different cores. Then implement this policy on Intel hardware.

#### Current Unikernel based on Linux.

This project aims to create a unikernel out of Linux and glibc with minimal code changes for a greater chance of being accepted upstream, while over time providing the benefits of research unikernels.

### 2018 Video-to-Video Translation, Class Project.

A frequency splitting technique using 3DRecycleGan to perform unsupervised video-to-video translation to preserve spatio-temporal consistency and motion continuity.

#### 2017-2018 Mix&Match Federation, Massachusetts Open Cloud.

Integrating multiple instances of OpenStack to enable a multi-landlord cloud model, where multiple service providers can cooperate (and compete) to stand up services in a single cloud, and users can federate resources between various services in various ways.

#### 2016 SignPost Android Application, Class Project.

A social media android application that allowed a user to leave comments at their current location via adding a signpost to Google Maps.

#### Relevant Coursework

- Advanced Operating Systems
- Computer Networks

- Computer Architecture
- Programming Languages