# Parth Shelgaonkar

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**Education** 

Fall 2016 - Spring 2020

#### **Purdue University, West Lafayette IN**

- Bachelors of Science in Computer Science (Class of 2020)
- Relevant Coursework- Operating Systems, Systems Programming, Software Engineering, Competitive Programming, DS & Algorithms, Computer Architecture, C Programming, Fundamentals of CS, Intro. To OOP (Java), Linear Algebra, Multivariate Calculus, Intro. to Statistics

**Experience** 

Aug, 2017 - Present

### Purdue University | Undergraduate Teaching Assistant

- Teaching Assistant for CS 252 (Systems Programming)
- Teaching Assistant for CS 251 (Data Structures and Algorithms)
- Teaching Assistant for CS 240 (C Programming)
- Teaching Assistant for CS 193 (Freshman Tools & Resources)

**Projects** 

packR

May 2018

• Data compression and zipping utility written in Rust.

April 2018

#### **Vendez Vous**

· Developed backend for networking web app in Node JS and integrated Mongo DB for user data persistence.

Jan. 2018 - Apr. 2018

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- Developed a cross-platform package manager for the \*nixes.
- Developed the client-end command line utility and repo server backend in C/C++.
- Designed and implemented the client-server protocol for package transmission and metadata schema for package management and dependency trees.

Dec. 2017 - Jan. 2018

#### **DRACO**

DRAwing COmpression library to compress images generated using SCRIBBLE by carving outlines to map shapes written in C.

April 2017

# IRC Chat

- Developed an IRC chat messenger app with separate rooms and saved user profiles with real time updates.
- Implemented the server and client in C using the GTK library for GUI.

Nov. 19-20, 2016

# FreeClicker

- Developed the Android version of the app during Hack OH I/O, at Ohio State Univ.
- FreeClicker is a free and open source alternative to the iClicker which can be used to take quizzes and polls in a classroom.

CelebFinder

Oct. 15-16, 2016

- · Implemented Chrome extension that recognizes faces of famous personalities during Hello World at Purdue Univ.
- CelebFinder uses Microsoft's Cognitive Sciences API to recognize the face in a YouTube video and scrapes Wikipedia page about the person to give info. It won the best web-app at the hackathon.

Scribble

2015

- Designed MS Paint like scribble pad using the Borland Graphics Interface Library in C (DOS).
- Implemented a newer way to save images drawn by the user by analyzing and mapping only the foreground to reduce memory footprint of the saved files.
- Ported legacy code to X11 for Linux and other Unix like systems.

2014 - 2015

## **Automated Home Security Solution**

- Designed IoT based home automation and security system using an Arduino microcontroller.
- · Implemented ultrasonic sensor-based security to scan rooms and send intruder alerts to users over Wi-Fi.

# **Programming Skills/Technologies**

Proficient in C/C++, Rust & Java

Familiar with Python, Shell scripting, ARM assembly, SQL, PHP, JavaScript, HTML & CSS