# Daksh Jotwani

djotwani@purdue.edu dakshjotwani@gmail.com (415) 866-9794 www.dakshjotwani.com github.com/dakshjotwani

## Education

### • Purdue University

West Lafayette, IN

August 2016 - Present

B.S. Computer Science Honors, B.S. Mathematics

- GPA: **3.95/4.00**, Dean's List.
- Expected Graduation Date: **December 2019.**
- Relevant ongoing courses: Algorithms, Machine Learning and Data Mining, Vector Calculus.
- Relevant completed courses: Systems Programming, Data Structures and Algorithms, Databases,
  Computer Architecture, C Programming, Linear Algebra, Real Analysis, Differential Equations.

# Work Experience

#### • Purdue University, Department of Computer Science

West Lafayette, IN

Undergraduate Research Assistant

September 2018 - Present

- Research the impact of speculative region-prioritization on search times for data-points in overlapping regions of an R\*-tree. Based on *The Case For Learned Index Structures* (arxiv.org/abs/1712.01208).
- Explore logistic regression and neural network models to speculate traversal routes of an R\*-tree.

#### • Purdue University, Department of Computer Science

West Lafayette, IN

Undergraduate Teaching Assistant

August 2018 - Present

- Teach and grade labs for a *Systems Programming* class that covers fundamental system calls and the use of operating systems.
- Host weekly office hours to answer questions related to lab assignments.

## • Myntra (Walmart Subsidiary)

Bangalore, India

Software Engineering Intern

May 2018 - August 2018

- Worked with Myntra Labs to integrate Myntra's online infrastructure with its offline stores.
- Applied computer vision techniques to monitor store traffic, analyze age/gender demographics, identify returning customers, and detect customer satisfaction.
- Developed a system where computer vision-based inferences from store cameras are broadcast to store devices to provide personalized services such as product/size recommendations to customers.

#### • Purdue University, Department of Physics

West Lafayette, IN

Undergraduate Teaching Assistant

August 2017 - May 2018

- Assisted in running weekly help sessions for an *Electricity and Magnetism* course.
- Held review sessions to solve practice problems for exams.

#### **Projects**

• PayShare

May 2018 - Present

- Developed a web application to split and keep track of expenses amongst a group of people.
- Applied image processing frameworks and Tesseract OCR to scan receipts and generate a list of items for users to select and split.
- Working on transitive simplification of group expenses and porting PayShare to Android and iOS.

• SmartPass October 2016

- Built an event-ticketing system which authorizes people using face/voice recognition.
- Deployed a server to provide face recognition services for iOS devices to identify people at events.

### Skills

Languages: C, C++, Python, Java, JavaScript, MATLAB.

Frameworks: React, Numpy.