Daksh Jotwani

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Education

• Purdue University

West Lafayette, IN

August 2016 - Present

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

- GPA: **3.94/4.00**, Dean's List.
- Expected Graduation Date: May 2020.
- Relevant Coursework: Deep Learning, Machine Learning, Systems Programming, Data Structures,
 Algorithms, Databases, Computer Architecture, Linear Algebra, Real Analysis, Differential Equations.

Work Experience

• Flipkart Myntra Jabong

Bangalore, India

Software Engineering Intern

May 2019 - Present

 Built a face recognition-based authentication process that allows registered Flipkart customers to enter their unmanned grocery stores.

• Purdue University

West Lafayette, IN

Undergraduate Research Assistant

September 2018 - May 2019

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

• Myntra Jabong

Bangalore, India

Software Engineering Intern

May 2018 - August 2018

- Applied computer vision techniques to monitor store traffic, analyze age/gender demographics, identify returning customers, and detect visual 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

West Lafayette, IN

Undergraduate Teaching Assistant

August 2017 - May 2019

- Teach and grade labs for a $Systems\ Programming\ class\ that\ covers\ fundamental\ system\ calls\ and\ the\ use\ of\ operating\ systems.$
- Assisted in running weekly recitation sessions for an *Electricity and Magnetism* course.
- Held weekly office hours to answer questions related to lab assignments for both courses.

Projects

• GTAi: Self Driving Car in GTA 5

March 2019 - Present

- Built a data-collection pipeline to map frames to controller inputs and load them for model training.
- Modelled a neural network architecture to output controls for a given frame using ResNet50 as a feature extractor, followed by a LSTM to infer temporal information from a sequence of frames.
- Working on using semantic segmentation to improve performance. (youtu.be/G2as7jAU4LM)

• PayShare

May 2018 - Present

- Developed a web application to split and keep track of expenses amongst a group of people.
- Applied 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.

Skills

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

Frameworks: PyTorch, React, Numpy.