# **ANSHUMAN PATNAIK**

### 4th Year Student & Aspiring Software Engineer

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### **EXPERIENCE**

#### Infrastructure Engineer

#### Wish (ContextLogic Inc.)

Winter and Fall 2016

San Francisco, CA

- Established a framework to allow developers to easily denormalize collections through timed migrations.
- Designed and built a framework to execute tools, commands and monitor the entire MongoDB cluster.
- Created a tool to launch a production-ready sharded MongoDB cluster in 5 minutes using AWS, Chef and Python.
- Architected and facilitated a migration of a portion of the existing database cluster to AWS, reducing main cluster load by 30%.
- Validated, automated, and executed two major upgrades on the MongoDB cluster leveraging benchmarking tools and in-house orchestration tools, in conjunction with Chef.
- Improved the robustness of existing infrastructure monitoring tools through increased parallelization and higher fault tolerance.
- Developed a log parsing tool for database logs to analyze and detect bad queries ad-hoc.

#### **Database Engineer**

#### **Rubicon Project**

**Q** Los Angeles, CA

- Maintained and optimized production MySQL database clusters through tasks such as query optimization, load balancing, and database backup automation.
- Designed and built a dashboard using a Ruby-based framework to display critical system health and current task metrics.

#### **Research Assistant**

#### **University of Waterloo**

Winter 2015

♥ Waterloo, ON

 Analyzed the short and long term stability of macroeconomic systems by comparing them to existing dynamic physics models.

## **PROJECTS**

#### **WaterBud**

- A proposed solution to curb household water waste by providing detailed breakdown of water use in a household.
- Designed and built a MVP(Minimal Viable Product) using Raspberry Pi, Tornado, Flask, and Python.

#### Monocle

 A real-time MongoDB cluster health visualizer built using d3.js and Flask built at a Wish Hackathon.

### **SKILLS**

#### **Progamming**

Python	BASH	Ruby	C++
MATLAB	Git		

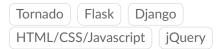
#### **Databases**

MongoDB	MySQL
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#### Infrastructure

Chef	AWS - EC2/S3/CloudFormation		
SaltSta	ck OpenStack	Networking	

#### Web



### **EDUCATION**

#### **Systems Design Engineering**

#### **University of Waterloo**

- Ranked 11/100 last 2 academic terms
- Cumulative average of 85.06% 3.9/4.0

## **AWARDS**



#### **Dean's List Honors**

Awarded to top 10% of students in a cohort, ranked 4th in Summer 2014.



#### **Engineering Entrance Scholarship**

Awarded based on academic achievement.



### President's Scholarship of Distinction

Awarded for an entrance average greater than 95%.

## **INTERESTS**