# ANSHUMAN PATNAIK

### **Software Engineer**

a3patnaik@uwaterloo.ca

**519-574-9852** 

in linkedin.com/in/a3patnaik

github.com/patnaa2

### **EXPERIENCE**

### **Infrastructure Engineer**

### Wish (ContextLogic Inc.)

🛗 Jan 2016 - Apr 2016, Aug 2016 - Dec 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.
- Built automation to launch a production ready sharded MongoDB cluster in 5 mins using AWS, Chef and Python.
- Validated, automated and executed two major upgrades on the cluster leveraging benchmarking tools and in-house orchestration tools in conjuction with Chef.
- Improved over existing monitoring tools through paralleization and higher fault tolerance.
- Developed a log parsing tool to analyze mongodb logs to detect bad queries ad-hoc.
- Optimized existing linters to statically analyze queries and warn/hint users about missing indexes and bad queries.

### **Database Engineer**

#### **Rubicon Project**

May 2015 - Aug 2015

**♀** 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/task metrics.

### **Research Assistant**

### **University of Waterloo**

max Jan 2015 - Mar 2015

♥ Waterloo, ON

 Analyzed the short and long term stability of macroeconomic systems using dynamic physical 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 using Rasperry Pi, tornado, flask, and python.

#### Monocle

• A real-time MongoDB cluster health visualizer built using d3.js and Flask.

## **SKILLS**

### **Progamming**

Python BASH Ruby C++
Matlab Git Latex

#### **Databases**

MongoDB MySQL

### Infrastructure

Chef AWS - EC2/S3/CloudFormation
SaltStack OpenStack Networking

### Web

Tornado Flask Django
HTML/CSS/Javascript Javascript
jQuery

### **EDUCATION**

### Systems Design Engineering

### **University of Waterloo**

Sept 2013 - Current

- Candidate for Bachelors of Applied Science - 2018 Expected
- Ranked 11 last 2 academic terms
- Cumulative average of 85.06

## **AWARDS**



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

Awared to top 10% of students in class based on academic merit, ranked 4th in Summer 2014



#### **Engineering Entrance Scholarship**

Awarded to students based on academic achievement



### **President's Scholarship of Distinction**

Awarded to Students with entrance average greater than 95%

## **INTERESTS**

Distributed Systems

**Economics**