ANSHUMAN PATNAIK

Software Engineer

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EXPERIENCE

Infrastructure Engineer

Wish (ContextLogic Inc.)

📅 Winter and Fall 2016 📍 San Francisco, CA

- Established a framework to easily allow developers to 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 mins using AWS, Chef and Python.
- Validated, automated, and executed two major upgrades on the MongoDB cluster leveraging benchmarking tools and in-house orchestration tools, in conjunction with Chef.
- Improved existing infrastructure monitoring tools through increased parallelization and higher fault tolerance.
- Developed a log parsing tool to analyze database 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

📅 Summer 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 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 using Rasperry 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

Infrastructure

Chef AWS - EC2/S3/CloudFormation
SaltStack OpenStack Networking

Web

Tornado Flask Django
HTML/CSS/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
Badminton Big Data