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 moving a portion of 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 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.

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 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

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 – April 2018 (Expected)

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

AWARDS

🏆 **Dean's List Honors**
Awarded to top 10% of students in class based on academic merit, ranked 4th in Summer 2014.

🎓 **Engineering Entrance Scholarship**
Awarded based on academic achievement.

🎓 **President's Scholarship of Distinction**
Awarded with entrance average greater than 95%.

INTERESTS

Distributed Systems   Economics   Badminton   Big Data