Zunayed A. Morsalin

zunayed@gmail.com Mobile: (917) 428-5839
https://dtostillwell.com https://github.com/zunayed

Education

New York University *September 2006 to June 2010*
Bachelor of Science, Electrical & Electronic Engineering

Experience

Tower Research
Senior Software Engineer *July 2015 to Present*

- Led a team that architected and implemented a 75,000 core high throughput compute cluster on Google cloud.
- Researched how solar weather affects high frequency radio transmissions for low latency communication.
- Converted services to use docker containers and to run in kubernetes cluster
- Created a python/django app to help aggregate, monitor and automate nagios checks of 7000 servers across 70 datacenters around the world
- Re-wrote performance sensitive python code to golang
- Created ETL platform for changes to network and trading infrastructure to observe changes that affected system reliability.

Spies & Assassins / KBS
Software Engineer *January 2014 to June 2015*

- Key member of a small team of engineers responsible for scaling python webs services to millions of requests a day using load balancers and caching.
- Worked on multiple Django backends that provided restful APIs for mobile apps and websites. Practiced test driven development and achieved over 90% test coverage on multiple apps.
- Automated the creation of development environments using Docker / Vagrant. Environment setup times were reduced from a few hours to minutes.
- Helped analyse data to facilitate in data driven decisions by doing exploratory data analysis with Pandas and Matplotlib. Visualizations were later created in D3.js for clients to interactively explore the data.

Jaros Baum & Bolles
Electrical Engineer *August 2010 to September 2013*

- Created custom Django app to automate document submissions along with scripts to automate cleaning, binding and organization in AutoCad that saved 5-10 hours per week.
- Played key role in designing a $1.2 billion, 22 story hospital for NYU, a 65-story office tower and electrical distributions in the World Trade Center & September 11 Memorial. Design included emergency power, fire alarm, life safety, IT & AV distribution, datacenter and lightning protection systems
- Used Matlab to do short circuit current analysis and visualizations of disaster scenarios

Skills

- Languages: Python, Javascript, Go, C++ (basic)
- Databases/Data Stores: Postgres, MySQL, Redis
- Production: Linux (ubuntu / fedora / RHEL) w/ docker, chef, fabric
- Libraries: pandas, numpy, sklearn, matplotlib, seaborn, d3.js, django, restframework, wagtail, haystack

Side Projects

- NYC 311 call data analysis & visualizations: analyzed distribution of complaints in various neighborhoods
- NFL running back stats prediction: created a linear regression model to predict fantasy football stats prediction
- 52 projects in 52 weeks on https://dtostillwell.com