Md. Readul Hasan Chayan - Résumé

Contact Information:

Md. Readul Hasan Chayan

Email: me@heemayl.net
Web: heemayl.net
Open Source code: github.com/heemayl

Professional Objective:

To work on stuff I like, for fun and profit.

Employment History:

Backend Developer
Saffron Technologies, Inc.
July, 2020 - Present

Development of backend of the Mata VC web app.

Tasks:

- API: Django and DRF (Django REST Framework) based API development.

- Async Tasks: Async tasks development for Celery with RabbitMQ as the broker
  and Redis as the result backend.

- Database: Postgresql with Django ORM for database operations.

- DevOps: Installation, configuration, and maintenance of all the system stuff on
  Amazon Web Services (AWS) including all the software packages on EC2.
  Creation and maintenance of deployment pipelines on GitHub Actions.

Mentor
CodeMentor
July, 2019 - Present

Helping developers on a wide range of topics including Python, Django, Flask, Docker, Databases, JavaScript, Git, GNU/Linux, Nginx, Regex, Shell etc.

Profile: CodeMentor.io/@heemayl

Tasks:

 - <u>Direct 1:1 Mentorship</u>

 - <u>Long-term and Short-term Freelance Jobs</u>

 - <u>Code Review</u>

Backend Developer
Cuz Translation
July, 2019 - December, 2019

Development of the web app backend.

Tasks:

 - <u>API</u>: Development of Django and DRF (Django REST Framework) based API.

 - <u>Database</u>: MySQL with Django ORM for database operations.

 - <u>Microservices</u>: Development of multiple Flask microservices.

 - <u>Deployment</u>: Deployment and maintenance of API and docker-based microservices on GCP (Google Cloud Platform).

Chief Technology Officer
Eating Habits
April, 2019 - June, 2020

Full stack development, deployment, maintenance, administration of the Hybrid

App (Web/Android/iOS).

Tasks:

- <u>Backend</u>: The backend is Python/Django, with a REST API written by me using DRF (Django REST Framework) exposed to the frontend for CRUD calls.

- <u>Database</u>: Used Postgresql with Django ORM for storing/retrieving data programmatically.

- <u>Frontend</u>: Written Quasar framework and Vue.js based frontend using Vue.js libraries like i18n, Vuex, vue-router, and so on.

- <u>Deployment/Maintenance/Administration</u>: Configured and maintained Nginx (as web server), uWSGI (as WSGI server), GitLab CI (for CI), Git (as VCS), Ansible (for automation).

- <u>Management</u>: Was responsible for taking various strategic decisions from technical perspective, and making sure the team is moving forward in harmony towards a collective goal.

Creator
Dealiable.com
June, 2018 - April, 2019

Full stack development, deployment, maintenance, administration is done by me.

Tasks:

- <u>Web scraping</u>: Written numerous web scraping and parsing scripts in Python for collecting product data from Online shops of Bangladesh. Notable libraries used: Selenium, BeautifulSoup, Requests.

- <u>Backend</u>: Written the backend in Python/Django. A REST API written using Django REST Framework (DRF) is exposed for the frontend.

- <u>Database</u>: Used Postgresql as the database to store scraped/formatted data. Used Django ORM for storing/retrieving data programmatically.

- <u>Frontend</u>: Used Vue.js as the frontend JS framework, and Bootstrap as the only CSS library. Everything else is written by me from scratch.

- <u>Deployment/Maintenance/Administration</u>: All deployment/maintenance works in VPS running Ubuntu as the OS, Nginx as the web server, uWSGI as the WSGI server is done by me. All System administration tasks are done by me, where most stuff is automated using either a respective library or through manual scripting. Revision controlling of all codes and configurations through Git is done by me.

Creator
BookShelfBD.com
December, 2017 - June, 2018

  All coding, deployment, maintenance, administration of this peer-peer book sharing Platform of Bangladesh is done solely by me.

System Administrator II
Therap Services LLC
October, 2017 - December, 2017

Development, Devops, System Administration.

Projects and tasks:

  - <u>Developed GNU/Linux Distro:</u> Single handedly developed, and maintained an Ubuntu based GNU/Linux distribution for internal use. The distro included all the bells and whistles including package management with independent repositories, custom packaging of programs, custom programs, maintainer methodologies, and so on

  - <u>Development:</u> Developed various toolsets and written many scripts for variety of tasks Including but not limited to inventory management, networking, device statistics, log parsing, text processing, resource tracking

  - <u>DevOps and System Administration:</u> Maintained and enhanced previously developed, implemented toolsets in the DevOps and System Administration chain, as day-to-day tasks

Associate System Administrator
Therap Services LLC
July, 2015 - September, 2017

GNU/Linux administration, Devops stuffs.

Projects and tasks:

- <u>GNU/Linux Administration:</u> Worked on, and debugged many GNU/Linux stuffs that require deeper understanding of the system, tools, and methodologies. Worked on both Debian (as desktop) and Fedora (as server) derivatives. Worked with various package management systems, diagnosed issues from lower level. Managed various init systems including Systemd, SysV, Upstart

- <u>Ansible:</u> Designed, written, and now maintaining the configuration management, and automation tool - Ansible. Currently, 20 configuration combinations of the company's infrastructure are fully automated through it

- <u>Centralized Logging Infrastructure:</u> Designed, implemented, and now maintaining the ELK (Elasticsearch, Logstash, Kibana) stack for Log management, it is now the centralized Log infrastructure for the company. Experienced with implementing, and administering Splunk too

- <u>Scripting:</u> Written many scripts according to customer requirements in Bash (also POSIX sh), Python, Go for the production environment. Also written many scripts for automating various System administration and DevOps tasks

- <u>Version Control:</u> Experienced with Git; designed, configured, and maintaining Gitlab -- the central Git remote repository infrastructure for the Operations people; all stuffs that need to be revision-controlled are put here

- <u>Nagios:</u> Configured, and maintained Nagios, the monitoring system. Written many plugins for Nagios using Bash, Python

- <u>Cacti:</u> Configured, and maintained Cacti for tracking relevant historic data (usually resource usages) from devices using SNMP. Written many custom scripts for getting and formatting the data properly

- <u>DNS:</u> Designed, implemented, and maintaining DNS server using BIND for internal use; had implemented variety of configurations for ensuring optimum security and usability

- <u>Text Processing</u>: Written scripts, and one-liners for various tasks involving text processing; tools used: awk, sed, grep, bash, python and other standard *nix text processing utilities

- <u>LXD/LXC:</u> Very familiar with Linux Namespace and Cgroups based machine-centric container technologies: LXC, LXD

- <u>Vagrant:</u> Extensively used Vagrant; created Vagrantfile, and other necessary wrapper scripts for VM creation and management

- <u>Docker:</u> Tested the possibility of deploying the company App with Docker; used Docker in many smaller projects

- <u>Virtualization:</u> Installed, configured, and administered Xen based OVM (Oracle Virtual Machine); written Python scripts for VM management using the REST API; familiar with QEMU, KVM, Virtualbox as well

- <u>Database:</u> Worked with relational databases especially MySQL, PostgreSQL; written queries as per requirements

- <u>Web Servers:</u> Installed, configured and now administering Nginx as web server, reverse proxy; working on performance optimization, secure transportation and overall efficiency. Also maintained Apache previously.

- <u>Performance Optimization:</u> Worked on optimizing various performance related Parameters of Linux kernel, disks, networks, and related toolsets.

- <u>Day-to-day Operational Tasks:</u> Performing the trivial Operational tasks regularly to keep the whole Operational ecosystem on the best performant state

Junior Unix Administrator
[Therap Services LLC](#)
July, 2014 - June, 2015

GNU/Linux Administration, System monitoring.

Projects and tasks:

- <u>Monitoring Infrastructure:</u> Monitored company's Java based web application, network, and related stuff, on a roster basis. Diagnosed problems, forwarded to tier-2 if needed; also done regular health checking of devices

- <u>Scripting for Production:</u> Written Python scripts for getting data from several production scripts by parsing mail, saved the data, sent mails as reports with detailed time and other relevant data

- <u>Cobbler:</u> Configured and maintained Cobbler for automating installation of various Operating systems on bare metal and virtual machines

- <u>Scripts for Monitoring:</u> Written scripts for automating various infrastructure monitoring tasks

- Log Parser: Written in-house application, and access Log parser for Company's Java based application for parsing logs, in Bash, *nix standard utilities, and Python

- Browser Automation: Written automated script for browser to get data from tools, using Python (webdriver based, used Selenium)

- Monitoring Tools: Extensively familiar with the inner-workings and administration of Oracle Enterprise Manager (OEM), Nagios, Cacti

Executive, Technical Support
[Bangladesh Online Limited (Beximco IT)](#)
April, 2013 - June, 2014

Configured and maintained networking devices of the ISP, provided support to the clients

Projects and tasks:

- Team Supervision: Supervised a team working on network infrastructure

- Infrastructure Monitoring: Monitored, on a roster basis, the whole network of the ISP; diagnosed and fixed issues

- Networking Device Management: Configured, and administered various brands of networking devices including routers, switches which were used in-house and also by the clients

- GNU/Linux and Service Administration: Installed and managed Debian/Ubuntu, and various needed services including but not limited to mail server (Postfix, Zimbra), proxy server (Squid) for the clients

- Firewall Management: Installed, configured, maintained PFSense (FreeBSD based) as a firewall, for the clients; also familiar with different forms of firewalls and such applications

- Client Support: Provided support to the clients over email, phone and on-premise

- Monitoring Tools: For regular monitoring, used Smokeping, Nagios, Cacti, MRTG, WhatsUpGold; familiar with all of these

Summary of skills:

Development Skills:
- Understand the software development metaphors, methodologies and best practices
- Inclined towards writing efficient algorithms and data structures
- Written many small and large scale programs, for various purposes, in various languages
- Experienced with full stack Web development; used Vanilla stuffs and also various popular frameworks like Django, Django REST Framework (DRF), Flask, Vue.js, Quasar, jQuery, Bootstrap, Wordpress
- Proficient with revision control using Git
- Experienced in TDD, and writing tests for backend/frontend
- Familiar with FOSS development architecture/workflow

Devops Skills:
- Highly proficient with scripting and text processing, for efficient automation
- Experienced with Ansible, ELK (Elasticsearch, Logstash, Kibana), Docker, LXC/LXD, Git and other relevant tools
- Understand the basis of the Devops culture and can act accordingly
- Deployment and maintenance experience on AWS (Amazon Web Services), GCP (Google Cloud Platform), VPS (Virtual Private Server), and bare metal

System Administration Skills:
- Highly proficient with the internals of any GNU/Linux distro
- Installation, configuration, maintenance of various packages
- Proficient with all mainstream package management tools
- Experienced with Linux Kernel internals
- Experienced with all trivial and nontrivial System Administration tasks
- Experienced with implementation of security policy

Language Skills:
- Proficient in Python
- Experienced in JavaScript especially Vue.JS, jQuery
- Experienced in HTML, CSS (Vanilla and Bootstrap)
- Proficient with POSIX sh shell and all derivatives
- Experienced with Perl, Golang
- Experienced with metalanguages: JSON, XML, YAML
- In depth experience with other tools: AWK, Sed, Grep, all standard *nix utilities

Others:
- Highly Proficient with Regular Expressions (RegExp)
- Experienced with various editors: Emacs (primary), Vi(m), Nano

<u>General Skills:</u>
 - Strong interpersonal skills
 - Experienced with supporting technical and non-technical personnel with various
   technical stuff
 - Can productively work under pressure, for long hours
 - Ability to work with fellow Developers, System Administrators, and others alike
 - Can communicate proficiently in English, and Bangla

Education:

M. Sc in Applied Physics, Electronics, and Communication Engineering
University of Dhaka
Class of 2013
Thesis: Design and implementation of a cognitive network
CGPA: 3.68

B. Sc in Applied Physics, Electronics, and Communication Engineering
University of Dhaka
Class of 2011
Project: Designing a secure wireless network for University of Dhaka campus, with
associated security policy
CGPA: 3.41

My Digital Footprint:

Usually, I like to pass my spare time on the StackExchange Network; here's the link
to my profile: https://stackexchange.com/users/2936584/heemayl?tab=accounts