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PIYUSH KHEMKA

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Stony Brook, New York

Stony Brook University

M.S. Computer Science

Stony Brook University

Aug 2016 – Dec 2017

GPA: 3.79 (2nd Semester)

(Expected)

Bangalore, India Visvesvaraya Technological University Aug 2010 – Jun 2014
B.E. Computer Science First Class with Distinction

WORK EXPERIENCE

EDUCATION

Role: Software Engineering Intern FACEBOOK Jun 2017 – Aug 2017

CLI for Facebook Open Switching Systems (Fboss), Python, Jinja2

- Designed & developed a command line interface for the Networks Infrastructure team.
- Implemented 55 commands which parse data from Thrift APIs & render output on command line using Jinja2 templates.
- Enabled engineers at data centers to easily manage & view network related information of Fboss devices.

Role: Tools Specialist, Trust and Safety GOOGLE July 2014 – July 2016

Title: Associate

Designed & developed enforcement tools for the Google Shopping team to help automate spam fighting.

Reviewers Assistance, C++, Protocol Buffers

- Redesigned the front-end & re-wrote the backend of an existing review tool to improve its efficiency & enforcement rate.
- Reduction in review time by 33% on average.

Review History Tool, Python, Bootstrap, Jinja2

- Designed & developed a tool that displays all enforcement actions taken on every Google Shopping merchant.
- 18% improvement in efficiency in troubleshooting & resolving difficult review tickets.

Appeals Automation, *Python & C++*

- Designed & deployed an automation to send canned responses to Shopping merchants based on their incoming queries.
- 10% of all incoming tickets were automated and average turnaround time for resolving tickets was reduced by 62%.

TECHNICAL PROJECTS

- Trainspotting: Computer Vision, Python, Machine Learning: Working with Prof. <u>Steven Skiena</u> to develop a data service that can automatically detect & monitor movement of goods on freight trains & make intelligent predictions about their price in future.
- Recasting Movies using IMDB data: Data Science, Python, Pandas: Built an Actor similarity score using k-means clustering & distance function to recast any movie with different actors across timelines. Given an input year & movie, system recommends most similar actors fit for the role.
- **Kernel module to manipulate global system call table**, *C, Kernel Programming*: Implemented a loadable module in Linux Kernel that can override default behavior of system call vectors per process. Also, wrote a corresponding user side program to let users change syscall vectors by a running process via an ioctl.
- Music Recommendation System, *Big Data, Python, Spark*: Designed & developed a Collaborative Filtering & Content Based Recommendation system to generate music recommendations to users using Million Song Dataset.
- Trace & replay support for File System Operations in Kernel, C Kernel Programming: Designed a tracing support for file system operations at Linux Kernel level and developed a functionality to replay them to the user from command line.
- Coin Toss Android Application, Java, Android: Published an Android app on the play store which lets users toss coins.

TECHNICAL SKILLS

- Languages C++, Python, Java, HTML, CSS, SQL
- Frameworks & Tools-STL, Pandas, Numpy, Scipy, Hadoop, Spark, Jinja2, Bootstrap, Git, Mercurial

AWARDS & RECOGNITIONS

- Spot Bonus, Google Awarded by Director for rigorous testing & debugging before deploying new infrastructure.
- Special Recognition, Google Awarded by my manager for quickly debugging and fixing issue causing tool failure.
- Won 3 Peer Bonuses at Google Awarded by peers for launching various new projects.