Rihan Pereira

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EDUCATION

California State University - Channel Islands	MS in Computer Science	GPA:3.70/4.00	Jan 2018 - Dec 2019
St.Francis Institute, Mumbai University	BS in Information Technology	GPA:3.00/4.00	June 2010 - July 2014

CERTIFICATIONS

AWS Certified Solutions Architect - Associate   **April 2020 - April 2023**

EXPERIENCE

IT INFRASTRUCTURE STUDENT ASSISTANT, California State University - CI, Camarillo, CA   Aug 2019 - Dec 2019
- Took initiative to automate operations on zoho inventory of university IT hardware using zoho REST API and python.
- Formulated plan to use blue-green deployment technique to reduce server downtime and handle upgrades.
- Incharged of administrating and imaging new hardware with Windows/Linux, encrypting volumes, setup network printers.

DEVOPS ENGINEER, Bitstreet Technologies, Mumbai, India   Jan 2017 - Jan 2018
- Awarded and recognized as a top performer, best performing team, meeting expectations plus performance.
- Designed internal reconciliation system on payments data, developed features for on-chain/off-chain transactions by integrating third party payment gateways.
- Built a time-series data archiving program operating on multiple MongoDB collections and exposed a pagination REST API.
- Configured 3-tier, multi-AZ environment containing Node.js/Express.js servers behind AWS ALB and MongoDB replica set.

SOFTWARE DEVELOPER, Bitstreet Technologies, Mumbai, India   Jan 2016 - Dec 2017
- Lead efforts to incorporate git-flow model improving developer productivity and ease of code deployment by 25%.
- Implemented salt & hashing and Multi-factor Authentication(2FA) with backup and recovery options to secure user accounts.
- Minimized friction during API integration with mobile/web clients by a factor of 2, transforming existing REST APIs to level 3.
- Added functionality to perform HMAC signing and Nonce between internal non-SSL HTTP services which provided integrity.

SOFTWARE DEVELOPMENT ENGINEER I, Aasaanjobs, Mumbai, India   Dec 2014 – July 2015
- Worked on end-to-end module that allows booking interview time slots using angularJS and Java/Spring Boot REST API.
- Dropped manual testing efforts to 30% by automating acceptance tests with phantomJS and Selenium.
- Refactored UI to be responsive to different viewports using Bootstrap, resulting in 15% increase in users retention.
- Wrote embedded js scripts to traverse heavy excel sheet data to fanout notifications.

PROJECTS

Whirlpool: six component microservice style scalable continuous topical web crawler   Jun 2019 - Oct 2019
- Used RabbitMQ to coordinate events across chain of components, formulated implementation in Java, Python, and Node.js. Used Min. priority queue to limit rate of crawling, bruteforce implementation of shingles using minhash, simhash to circumvent deduplication and devised Locality Sensitive Hashing(LSH) to address it at scale.
- Deployed within AWS VPC, multi-AZ environment using AWS cloudformation, authored custom AWS IAM policies and roles.

Advanced Image Analysis & Techniques   Aug 2018 - Dec 2018
- Applied several techniques to array of images - histograms, image enhancements/restoration, morphology operations, segmentation methods and feature extraction(counting)

Cybersecurity ● CI Security Lab   Sept 2018 - Dec 2018
- Implemented CBC mode to systematically encrypt/decrypt a large plaintext file using 16 rounds of 64-bit DES, SQL Injection attack, case studies on Stuxnet malware, olympic destroyer.
- Gave a talk on securing multi-tier web apps using web cookies vs OAuth vs JWT vs signatures vs Macaroons.

Human Computer Interaction ● User Experience Lab   April 2018
- Turned a lo-fi wireframe into a prototype featuring interactive GUI dashboard which allows a user to train/load/save handwritten digit classifier based on supervised ML and display metrics of its performance.
- Lo-fi sketch & codework on two-way imperial to metric units conversion tool

rihanp.me: Fully automated static site portfolio composed with git, Travis CI, markdown, vim   Jan 2018 - present

SKILLS

- **Languages:(Over 5000 lines)** Java, Javacscript, Node.js, SQL, Bash, HTML5, CSS3 | **(Over 1000 lines)** Python, YAML
- **Frameworks/Libraries:(Extensive)** Spring Boot MVC, Express.js, Selenium, Junit, Flask | **(Comfortable)** Django
- **Tools/Technologies:(Extensive)** Git, Ansible, Microservices, Jenkins, Postman, Docker, Memcached, RabbitMQ, MySQL, MongoDB, AWS, Cloudformation | **(Comfortable)** JIRA, Kafka, Terraform, Kubernetes

EXTRACURRICULARS

- Play/record guitar, bass, archiving/remastering records, feeling music in a quiet space.