Rounak Vyas

Website: https://rounakvyas.me

GitHub: itsron717 **LinkedIn**: itsron143

Education

June 2016 - **Bachelor of Technology (B.Tech)**, *Information Technology, SRM Institute of Science and Technology*, July 2020 Chennai, India.

Undergraduate Thesis: Classification and Localisation of acne lesions using Object Detection Algorithms.

CGPA: 9.28/10.00

Experience

Aug. 2020 - Graduate Analyst, Risk Finance and Treasury Team, Barclays, Pune, India.

Present • Architected and Implemented a custom job scheduler using Quartz that handles data-archival processes across

- various teams inside the company. The scheduler is integrated and synchronised with other micro-services.
- Helped set up a caching layer over the main API that deals with storing metadata information to provide dataset management services. It improved the registration time of new trade datasets.
- Implemented a custom date-formatter for end-users to create custom dates on the fly while using the main metadata API, among other features and bug-fixes.

Jan. 2020 - Research Intern, Harvard Medical School, Cambridge, Massachusetts.

July. 2020 • Worked under Dr Shiladitya Sengupta at Center of Engineered Therapeutics, on Object Detection Algorithms such as Faster-RCNN and RetinaNet for localisation and classification of acne lesions.

• Worked under Dr Vivian Lee, on an Automatic XY Calibration System for Aether 3D-Bioprinter which calculates XY offsets of multiple extruders using Computer Vision.

Dec. 2018 - Software Technology Intern, Thomson Reuters, Hyderabad, India.

Jan. 2019 • Worked in a team of 3 interns to implement a Proof of Concept to integrate ELK (Elasticsearch, Logstash, Kibana) Stack to an existing chatbot for real-time log aggregation, analysis and querying.

 Designed and implemented internal tooling to improve indexing time of documents by 85% with the help of concurrency.

Programming Skills

Languages: Java, Python, C/C++ **Frameworks**: Spring, Hibernate, Flask, OpenCV

Databases: MySQL, Elasticsearch Work Flow: Git, GitHub, Travis CI

Projects

- **calibCV**: An automatic XY calibration system for Aether 3D-Bioprinter using Computer Vision. A web app to calculate XY offsets of multiple extruders of a 3D Bio-Printer. The project was under the supervision of Dr. Vivian Lee, Harvard Medical School.
- markov-gen: A Markov Chain Text Generator used to randomly generate (somewhat) realistic sentences, using words from a source text. Words are joined together in sequence, with each new word being selected based on how often it follows the previous word in the source document.
- o es-indexer: A PyPi package to populate json data into elasticsearch efficiently using multi-threading.

Awards and Extracurriculars

Aug. 2019 Speaker, PyCon New Zealand (Kiwi PyCon X), Scholarship: 500 NZD (≈ Rs. 23000).

Mar. 2019 3rd Place, Ctrl-Alt-Code IoT Hackathon. Team Captain: Team Park.ai.

Jun. 2018 Academic Scholarship of Rs. 21500, Department Rank Holder List, 2017-2018.

Aug. 2017 Student Researcher, Artificial Intelligence, Next Tech Lab, Chennai, India.

Jan. 2012 Table Tennis: Top 8 of 100+ teams in School Games Federation of India Nationals.