SHAURYA KHURANA

Software Engineer [LinkedIn](#) [GitHub](#)

+1(605) 202 9181
shauryakhurana0@gmail.com
Vermillion, SD 57069
https://shauryakhurana.netlify.app

WORK EXPERIENCE

Graduate Research Assistant, UNIVERSITY OF SOUTH DAKOTA, *Jan 2020 - 2021*

- Leveraged Smartsheets API to programmatically access **hierarchical data** and transformed it into a **user-interactive dashboard** for biomedical researchers.
- Invented a Python library REMAP to structure and sync data with **Elasticsearch**.
- Designed a **data mining** workflow for Biofilm Data & Information Discovery System.
- Built a web application 2DMatchecker in **Streamlit** for computing the characteristics of 2D material using **Logistic Regression** and **K- Nearest Neighbors**.
- Implemented an authentication gateway for Globus platform using **Python SDK**.

Data Analyst, ZENATIX SOLUTIONS, Gurgaon, India, *Feb 2019 - Dec 2019*

- **Exploratory data analysis** - analyzed unstructured **big-time-series** from **IoT** sensors by data resampling, identified use cases by statistical modelling, and benchmarked data by detecting anomalies using visualizations for scalability across customers.
- Forecasted data like Energy Consumption, Energy Savings, Equipment Failures, Controller Health with over 95% **F-score** using **Fourier Transforms** and **ARIMA**.
- Optimized a **K- Means clustering model** to cluster appliances and scheduled time-based and temperature-based controls on them for reducing costs up to 30%.
- Streamed data into KPIs and structured it into metrics by removing inconsistencies.
- Introduced a data extracting tool (DWYW) using ipywidgets for account managers.
- Refactored code by modularizing programs in Django to clean and improve its internal structure, speeding up the development time by 150%.

Programmer Analyst, COGNIZANT, Hyderabad, India, *Nov 2016 - Feb 2019*

- Integrated multiple sources of leases data into one system using Pandas and SQL.
- Developed a dashboard in Redash to capture all customer's change requests.
- Accelerated **Business intelligence reporting** to assist clients with purchase-versus-leasing decisions by utilizing IBM TRIRIGA SaaS, **Python SciPy stack,** and **Tableau**.
- Automated the process of loading leases data (.DIF files), reducing the time by 70%.
- Upgraded the KLT framework to fetch customer surveys by designing **REST APIs**, and mapped feedback into the application by incorporating the **Agile** approach.
- Innovated a data-driven model to determine the employee's incentive from tickets.
- Created Application, Database, Process, and BIRT servers in PROD and UAT environments for new clients using AMIs, CloudFormation, and Puppet.
- Designed auto-generated daily email reports like Disk Usage, CPU monitoring, and Server States with detailed analytics for management using Seaborn and **Dynatrace**.
- Expanded **classification** of log errors using regular expressions and defined user usage statistics across multiple servers, to speed up hotfixes and patching by 80%.

INDEPENDENT PROJECTS/ TOOLS

- **COVID -19 dashboard** for visualizing trends worldwide and predicting recovery rate with up to 90% accuracy using Polynomial Regression, and Cross-Validation scheme.
- **Genetic Algorithms automated simulations** in Matplotlib for solving NP-complete problems efficiently like Travelling Salesman Problem and String Matching.
- **Edge Map detection in Chest Radiographs** for understanding abnormalities with Image Processing techniques and Deep Learning Convolutional Neural Networks.
- **Reading Digital Certificates** with template-based matching using OpenCV and OCR.
- **NSE Equity Analyzer** - stocks screener**, IDK-GST** - GST bill calculator**, Scholar sheets -** Kindergarten worksheets, **Music Jambox -** scrape lyrics & artists info**, Resume Parser.**

EDUCATION

Master of Science, Computer Science, *3.7*
University of South Dakota*, (2020 − 2021)*

Bachelor of Technology, Electronics & Telecommunication, *3.74*
Jaypee Institute of Information Technology, India
(2012 − 2016)

SKILLS

Languages: Python (advanced), Git, SQL, Markdown, JSON, YAML, Bash, HTML, Java (familiar), C (basic)

Machine Learning: Pandas, NumPy, scikit-learn, SciPy, statsmodels, sympy, TensorFlow, Keras, Django, Flask

Visualizations: Matplotlib, Seaborn, Kibana, Streamlit, Plotly, Tableau, pygal, Google Data Studio, Lucidchart, Folium, Bokeh, cufflinks

Database: RDS, Elasticsearch, SQLite, DynamoDB

DevOps: AWS, GitHub, Docker, Puppet, Grafana, Netlify, Gitbook, Auto-Scaling, CloudFormation, Heroku

Tools: Redash, Jira, ServiceNow, Postman, Sagemaker, Jupyter Notebook, MS Excel, PuTTY, WorkFlowy, Trello

Interests: Predictive Analytics, Feature Engineering, Signal Processing, Statistical Modeling, Web Scraping, Information Visualization, Applied Mathematics, NLP, Data Structures and Algorithms, Artificial Intelligence, Financial Analysis, Computer Vision, Data Mining

LEADERSHIP/ ACHIEVEMENTS

Beta Tester & Mentor at COURSERA, *Aug 2017- Present*
Acquired **80+ certifications** from eminent universities and organizations via MOOCs in the field of technology, finance, and management.

Certified the **Google IT Support Professional Specialization** to advance in troubleshooting, customer service, networking, operating systems, system administration, and security, *June 2020.*

Content Creator of Python **Data Science stack** tutorials

SPOT Award for contribution in achieving desired Business Results, COGNIZANT, *Nov 2017*

Volunteer at COGNIZANT Outreach and USD Pantry.
Summer Intern at ALCATEL LUCENT and CEL INDIA.

Digital & Social Marketeer for brands HAPPAY, AMBIPUR, GRADEUP and VIHA LIGHTS.