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## 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 (Pandas, NumPy, Matplotlib, sympy, scikit-learn, Seaborn, TensorFlow, Keras, Django, Flask, Streamlit, os, Plotly, statsmodels), HTML, Markdown, JSON, YAML, Java, SQL, Bash, Git

**Database:** PostgreSQL, Elasticsearch, SQLite, sMAP

**Cloud AWS:** EC2, VPC, S3, EBS, IAM, SNS, Load Balancing, CloudWatch, Auto-Scaling, CloudFormation, RDS, DynamoDB, Sagemaker

**DevOps:** GitHub, Docker, Puppet, Grafana, Netlify

**Tools:** Jupyter Notebook, Tableau, Redash, Jira, Kibana, Google Data Studio, MS Excel, ServiceNow, VS Code, PuTTY, Postman, Gitbook, Lucidchart, WorkFlowy

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

## 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

# SHAURYA KHURANA

Data Scientist  [LinkedIn](#)  [GitHub](#)

## 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** 2DMatchchecker 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 by removing inconsistencies and structured it into **metrics**.
- 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 trend 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**.