Kanika Jindal

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EDUCATION

University of Southern California, Los Angeles, CA — **Expected Dec 2022**
Master of Science, Computer Science — **GPA - 3.8/4.0**
Courses: *Foundations of AI, Analysis of Algorithms, Machine Learning, NLP, Web Technology*

Guru Gobind Singh Indraprastha University, Delhi, INDIA — **Aug 2015 - Jun 2019**
Bachelor of technology, Computer Science and Engineering — **GPA - 8.92/10.0**
Courses: *Algorithms and Design, Object Oriented Programming, OS, Compiler Design, Data Structures, Artificial Intelligence*

CORE TECHNICAL COMPETENCIES

- **Interests and Domain:** Full stack development, Knowledge Graph, Data Analysis, Machine Learning, NLP, Time Series
- **Languages and Frameworks:** Python, C, C++, HTML5, CSS, AngularJS, JSON, Flask
- **Databases and QL:** MySQL, MongoDB, Neo4j
- **Libraries:** Bokeh, PlotLy, Matplotlib, Dash, BokehJS, Seaborn, Scikit Learn, Spacy, Gensim, Keras, Pytorch
- **Tools and Others:** Jira, Jupyter, PyCharm, Spyder, Google Colab, SageMaker, GCP, Git, Postman, Tableau, Docusauras, Docker, Agile

EXPERIENCES AND ACHIEVEMENTS

Graduate Teaching Assistant | University of Southern California, Los Angeles, CA — **Jan 2021 - Present**
- Graded assignments, quizzes, and held office hours to assist graduate students with code debugging and homework.
- Produced course materials for DSCI 510 - Programming with Data Science, ITP 249 - Introduction to Data Analytics, BUAD 312 - Data Science and Statistics for Business and DSCI 558 - Knowledge Graphs.

Research Assistant Intern | Information Sciences Institute, Los Angeles, CA — **Jun 2021 - Aug 2021**
- Assisted Professor Pedro Szekely in creating knowledge graph.
- Used community detection algorithm to link the authors, co-authors, their research topics, and grants from academia research data.
- Successfully crawled data and created knowledge graph with 40k different nodes and 100k relations.

Software Engineer | Sopra Steria, Noida, India — **Aug 2019 – Dec 2020**
- Reduced **human effort by 80%** by developing a Python Library for Natural language processing and topic modelling pipelines.
- Increased the **prediction accuracy scores** by min 3% for projects by benchmarking models such as AR, MA, ARIMA, LSA, LDA, HDP.
- Worked on **Smart Ticket Analysis** for ticket systems such as JIRA to predict, forecast, and recommend a solution until human intervention.
- **Developed dashboards** for data analysis using Dash, plotLy, Bokeh and built data stories for six internal stakeholders.
- Won award in Q2 2020 for being an **outstanding performer and contributor** to Research & Development.

Software Development Intern | EzySchooling, New Delhi, India — **Jun 2018 - Jul 2018**
- **Reduced human effort by ten hours** by digitising admission forms for primary schools in India.
- Used Handwriting text recognition (HTR) and **Optical Character Recognition** through Tesseract and OpenCV to create bounding boxes according to given template form with accuracy to extract characters of 84%.

Research and Data Analytics Intern | AAP, New Delhi, India — **Mar 2018 - May 2018**
- Optimized staffing and helped cutting monthly costs by 40% by predicting ratio of solved to pending cases in given time frame.
- Researched and designed ideas for machine learning implementation strategies in present systems to achieve best policies and practices.

ACADEMIC AND PROFESSIONAL PROJECTS

- **Cloud Cover App** | *Python, Flask, JSON, Tomorrow.io API, Geocoding, Google cloud Platform*
  A webpage that allows user to search for weather information anywhere in the world or the current location and for any past date.
- **Anti-Money Laundering System** | *Python, Data Analysis, Leaflet, Bokeh, Geospatial*
  Flask API and angular webpage to assist global banking system to investigate daily, monthly, and yearly transactions to prevent laundering.
- **PyForecast** | *Python, Flask, Time Series, Plotly, Dash*
  Python library that helps in benchmarking time series algorithms and provide one line code for visualizations and metrics calculation.
- **Rich text Segmentation** | *Python, Supervised ML, Pandas, TF-IDF, Scikit Learn, Numpy, Few Shot Learning, Flask*
  Document segmentation using Multinomial Naïve Bayes algorithm and few shot learning, with accuracy score of 95% on .txt documents.
- **Footfall for Growth** | *Data Analytics, R, Shiny*
  Analytics dashboard of interactive charts (line, pie, bar) for customer footfall in a retail store in order to grow markets through sales.
- **Inter-Stellar** | *Time Series Forecasting, Python, LSTM, Flask, Dash*
  Lead the team of four to develop an application to predict and forecast price of Lumen with 94.3% accuracy using LSTM model.

LEADERSHIP AND EXTRA CURRICULAR

- Contributing to **OpenSource** Python library **Pycaret** as a lead developer for their new module.
- **Senator** for Viterbi Graduate Student Association (2021-22) at USC.
- **Global Ambassador** at WomenTech Network and member of WiMLDS, Delhi Chapter.
- Presented in JP Morgan and Stanley's **Data for Good hackathon**.
- Benchmarked different AutoML platforms for **IBM's in-house Watson Studio team**.
- **Vice President** for Music Society (2017-2019) in Undergraduate.
- **Published** Achieving Artificial General Intelligence (AGI) using Meta Learning — Learning to Learn, in Noteworthy – The Journal.
- Completed **Machine Learning and Deep learning certification** by Stanford University and Tensorflow.js in Summer 2020 on Coursera, got Python certification from IIT, Madras in Summer 2018 and completed Udacity's Nanodegree of application of machine learning.