VIKRAM SUNIL BAJAJ

✉ vikrambajaj@nyu.edu | ☎ +1 (347) 986-4201 | 🌐 vikrambajaj.me | 📍 Jersey City, NJ
in /in/vikrambajaj22 | ⊡ /vikrambajaj22 | 🐦 /vikram_bajaj

EDUCATION

New York University | Tandon School of Engineering   **Brooklyn, NY**
Master of Science in Computer Science (GPA: 3.93/4)   *May 2019*
- **Relevant Coursework**: Machine Learning, Data Science, Big Data, Info Visualization, Computer Vision, Cloud Computing, Databases, Algorithms
- **Honors**: Awarded an **Academic Achievement Award** and a **merit-based graduate scholarship**

Gandhi Institute of Technology and Management GITAM School of Technology   **Hyderabad, India**
Bachelor of Technology in Computer Science and Engineering (GPA: 3.95/4)   *Apr 2017*
- **Relevant Coursework**: Artificial Intelligence & Machine Learning, Data Mining, Cloud Computing, Probability & Statistics

EXPERIENCE

Curai   **Palo Alto, CA**
Software Engineering Intern (Machine Learning)   *Feb 2019 - Apr 2019*
- Built a "Suggest Diagnoses" feature with **Deep Learning**-based dermatological disease diagnosis in **First Opinion** to aid doctors with diagnosis
- Implemented a "Next Question" flow to determine the next question to ask a patient with Deep Learning-based image differential as a prior
- Trained a Rash vs. Neoplasm classifier (using **PyTorch**) that achieved 90% accuracy on dermatologist-annotated test images, to enable triaging
- Developed a reusable image annotation tool and a **React** UI to demonstrate various Deep Learning models for dermatological disease diagnosis

Deutsche Bank | Chief Data Office   **New York, NY**
Technology Analyst Intern   *Jun 2018 - Aug 2018*
- Applied **Natural Language Processing** in **Python** to map attributes based on similarities in their descriptions, toward automating data lineage
- Performed **sentiment analysis** of news articles to analyze the correlation of sentiment with stock trend; built a **Flask** web app to demonstrate
- Reviewed the ML capabilities of DgSecure for the detection of personally identifiable information in unstructured data, toward GDPR compliance

New York University | Center for Data Science and Tandon School of Engineering   **New York, NY**
Graduate Teaching Assistant and Grading Assistant   *Nov 2017 - May 2019*
- *TA* for **Information Visualization** (CS-GY 6313) in Spring 2019, **Deep Learning** (CS-GY 9223-E) in Spring 2018, **Big Data Analytics** (CS-GY 9223-G) in Fall 2017 at NYU Tandon. *GA* for **Deep Learning** (DS-GA 1008) in Spring 2018 under Prof. Yann LeCun, **Intro to Machine Learning** (DS-GA 3001) and **Programming for Data Science** (DS-GA 1007) in Fall 2018 at NYU CDS

Indian Institute of Technology (IIT Madras) | Visualization and Perception Lab   **Chennai, India**
Summer Fellowship Intern   *May 2016 - Jul 2016*
- Implemented a Content-Based Image Retrieval (CBIR) system in **MATLAB**, using **Computer Vision** and **Machine Learning** techniques

PROJECTS

Firewatch: Visualizing U.S. Wildfire Data | D3.js, Tableau   *Oct 2018 - Dec 2018*
- Used D3.js and Tableau to develop interactive visualizations (choropleth maps, bar charts and line charts) for U.S. wildfire data

Viki: A Web Search Engine | Python   *Oct 2018 - Dec 2018*
- Built a web search engine, comprising of a focused crawler, an indexer and a query processor
- Also performed a comprehensive survey of various query-independent and query-dependent search result snippet generation techniques

MusiCloud: A Cloud-Based Music and Concert Recommendation System | AWS Services, Python, Node.js   *Mar 2018 - May 2018*
- Led a team to develop a conversational bot that recommends music and upcoming concerts, using **AWS Services** and the Songkick API

Mask-it: Applying Snapchat-like Filters on Face Images | Python   *Mar 2018 - May 2018*
- Implemented the overlaying of Snapchat-like filters on face images: face detection, landmark detection, mask morphing and alpha blending

NYU Network: A University Social Network | MySQL, PHP, HTML, CSS, JavaScript   *Mar 2018 - May 2018*
- Created a social network prototype; features: sending friend requests, creating posts, likes, dislikes, updating user profile, viewing activity feed

Global Temperature Change Prediction | Python   *Oct 2017 - Dec 2017*
- Predicted the temperature of a given city across a specific time period, using an ARIMA model for **time series forecasting**

Climate Change and its Impact on Health | PySpark, Spark MLlib, Tableau   *Oct 2017 - Dec 2017*
- Leveraged Big Data tools to analyze climate change and pollution data, and study their impact on human health

AI Sight: Object Recognition on your Smartphone! | Java, XML, Caffe   *Dec 2016 - Feb 2017*
- Independently developed an Android app for offline object recognition (available on Play Store)

PUBLICATIONS

- Santosh, D. Teja, Vikram Sunil Bajaj, and Varun Sunil Bajaj. "Development of a Micro Hindi Opinion WordNet and Aligning with HOWN Ontology for Automatic Recognition of Opinion Words from Hindi Documents." *International Conference on Next Generation Computing Technologies*. Springer, Singapore, 2017

SKILLS

- **Programming Languages**: **Proficient**: Python, SQL, MATLAB; **Working Knowledge**: R, Java, D3.js, Node.js; **Familiar**: C, C++
- **Data Science Libraries (Python)**: scikit-learn, nltk, gensim, pandas, numpy, matplotlib, plotly
- **Tools/Technologies**: Data Science, Machine Learning, Deep Learning (PyTorch, Keras-TensorFlow), Computer Vision, NLP, Tableau, Big Data (Hadoop, Spark, PySpark), AWS (Lambda, Lex, Amazon ML, Elasticsearch, DynamoDB), Flask, React, LaTeX, Graphic Design

CERTIFICATIONS

- **Introduction to R for Data Science** certificate by Microsoft on edX   *Jun 2019*
- **Deep Learning Specialization** certificate by Andrew Ng (deeplearning.ai) on Coursera   *Sep 2018*
- **Introduction to Corporate Finance** certificate by the Wharton School, University of Pennsylvania on Coursera   *May 2018*
- **Introduction to Python for Data Science** certificate by Microsoft on edX   *May 2016*
- **Machine Learning** certificate by Stanford University on Coursera   *Apr 2016*