# DEEP PATEL

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# **EDUCATION**

Towson University- BS in Computer Science

Towson, MD, May 201

GPA-3.98/4.00 | Summa Cum Laude, Dean's List (8x), International Student Scholarship.

Relevant Coursework:

Computer Science: Database Management, Scripting Languages, Data Structures and Algorithms, etc.

Math: Advanced Calculus, Differential Equations, Probability & Statistics, Linear Algebra

# TECHNICAL SKILLS AND INTERESTS

**Programming**: Java (5), **Python (5)**, C/C++ (3), MySQL (4), HTML5/CSS (3), Scala (3), JavaScript (3), Kotlin (3), NodeJS (1), Perl (1).

*Big Data / Machine Learning*: TensorFlow, Keras, Numpy, Pandas, Spark, Flask, BigQuery, Seaborn, Matplotlib, ScikitLearn.

Other: Android, Windows, Linux, Git, Google Cloud, AWS, Excel, Postman, Colab, Jupyter, Agile Practices

Scale: 1-5 = beginner to advanced

- \* Experience in applying and using Data science tools, Machine learning algorithms, and Deep Learning
- ❖ Android development in Kotlin including SQLite, MVC, Services, Fragments, etc.
- ❖ Data Visualization adeptness to gain important insights from the dataset.
- ❖ Agile software development methodologies, algorithm design and analysis.

Hobbies/Interests: Machine Learning/AI, Deep Learning, Research, Spacecrafts, Wildlife, Yoga, and History.

## **EXPERIENCE**

# **Towson University - Computer Science Department**

Towson, MD

Research Assistant

August 2018 - May 2019

- Performed independent research on classification of edible wild plants using transfer learning.
- Trained and fine-tuned RESNET50 model and CNN features to improve model performance by 15%.
- Carried out Exploratory Data Analysis and solved data imbalance using SMOTE techniques.
- Used Confusion matrix and ROI to evaluate the model performance.

# **INSURE - Johns Hopkins University - APL**

Baltimore, MD

Machine Learning Lead

*December 2018 – May 2019* 

- Actively involved in all phases of data science project life cycle including **Data Extraction**, **Data Cleaning**, **Data Visualization** and **building Models**.
- Used Natural Language Processing (NLP) to detect malicious websites and deployed the model to AWS.
- Integrated the trained LSTM model into the backend of a chrome extension for ease of usage.
- Visualized the data using **TF-IDF** and **SHAP** to find accurate correlation between features.

## **EXTRACURRICULAR ACTIVITIES**

# Cool Dictionary Project, Group Leader

- A smart dictionary for android to demonstrate android development skills in Kotlin.
- Used agile development techniques to lead the team of 4 members.
- Integrated TensorFlow lite model in the app for sentiment analysis using NLP
- The app used **RESTful API** from oxford dictionary.

## CheckCasher Java application, Solo Project

- Developed a Java swing application for a business to keep track of check cashing customers in an embedded SQL (Apache Derby).
- Implemented required features using **object-oriented design** and agile methodologies.
- Wrote complex **SQL queries** to extract data from the database.