

# Abhishek A. Mishra

<https://abhiamishra.github.io>

Work Authorization: Authorized to work - have EAD

Email : [abhiamishra0@gmail.com](mailto:abhiamishra0@gmail.com)

Mobile : +1-313-913-6629

## EDUCATION

### The University of Texas at Dallas

*Bachelor of Science in Computer Science; GPA 4.0/4.0. Minor in Spanish; GPA 4.0/4.0*

Richardson, Texas

*August 2020 - May 2023*

## SKILLS

**Programming Languages:** Java , Python , R , JavaScript , C++ , TypeScript , Unix , Node.js

**Frameworks:** tidyverse , dplyr , XGBOOST , Git , OpenCV , Pandas , Matplotlib , Linux , Firebase , FastAPI , Alembic , SQLAlchemy , knitr , ShinyR , ggplot2 , Caret

**Relevant Coursework:** Data Structures and Algorithms , Linear Algebra , Probability and Statistics , UNIX , Java

**Languages:** English , Hindi , Spanish

## WORK

### CS Research Lab for Professor Tien Nguyen

*Research Assistant · Linux, MUDetect, Tmux, Maven, Ant, Java, Docker*

University of Texas at Dallas

*Jan 2023 - Present*

- Accelerated the work on building **gwt** and **android** projects with **Maven, Ant, and Java** and sped up workflow by **50%**.
- Utilized the faculty top-of-the-line **Ares server** and sped up data pre-processing by **30%** with the use of **Linux and Tmux**
- Used **Docker** to replicate **SnR model** to provide comparison metrics to model.
- Aided graduate students with day-to-day code-work and **debugging for their projects** resulting in a **40%** increase in productivity.

## PROJECTS

### ggshakeR (<https://github.com/abhiamishra/ggshakeR>)

*Creator/Maintainer · R, Markdown*

*Oct 2021 - Present*

- Pioneered the creation of R's **1st all-in-one visualization and analysis package for openly available soccer data**.
- **Authored 9** functions while working with other contributors, as an open source project, to co-author 5 functions. Functions are compatible with **JSON data and specific APIs** while also supporting the use of **webscraped data**.
- Coded function use cases range from **data wrangling, visualization**, and implementation of complicated analysis such as **Markov chain analysis**
- Contributor to the official landing page with Github Pages that experiences an average of **1000+ views and 100+ unique visitors per week**. Initial release and updates invite upwards of **1500+ views on the package daily**.
- Recognized by various international open-source communities and package aggregators such as **PySport** and **LibHunt** while being one of the **most in-demand packages** in the soccer analytics community.

### Themis

*Backend Developer/MLOps Developer · Python, FastAPI, MongoDB, SpaCy, NLTK, Heroku*

HackDFW 2022

*September 2022 - September 2022*

- **Innovated the backend** to create an **automated ML pipeline** that retrieved, analyzed, and stored text data for more than **500+ Supreme Court cases**.
- Utilized **NLTK Tokenization** and **SpaCy model** to automatically parse and extract key information from advanced legal documents
- Worked with **MongoDB** to store processed data for **500+ documents** and used **FastAPI** to provide seamless connection for the app. Deployed the entire application on **Heroku**.
- **Led teammates to create an interactive demo** which resulted in the project being picked as the **final 7 projects in a pool of 500+ competitors**.

### emo7ion - AIM Showcase Project

*Backend Developer · Python, Tensorflow, Keras, AWS S3, AWS SageMaker*

*Feb 2022 - May 2022*

- Created a real-time model using Python and Tensorflow/Keras libraries to be able to **detect emotion from facial analysis**.
- Stored images for training the model in **Amazon S3 buckets** with **AWS S3**.
- Constructed and trained the image-classification model in **AWS SageMaker** and deployed it on **AWS SageMaker Endpoint**.
- Presented a live working demo to a **panel of UTD Computer Science Professors**.

## ACHIEVEMENTS

**Top 7 Finalist at HackDFW22:** Selected in the finals among 550+ participants and presented in front of VIP Judge Panel

**Dean's List:** Fall 2020/Spring 2021, Fall 2021/Spring 2022: Ranked in Top 10 % in Erik Johnsson School of Engineering and Computer Science

**2nd Place at HackReason 2022:** Ranked 2nd among 70 teams of undergraduates and graduates.