

## EDUCATION

---

**University of Texas at Dallas**  
*Bachelor of Computer Science; GPA 4.0/4.0*

Dallas, Texas  
*Aug 2020 - Present*

## PROJECTS

---

### **ggshakeR (continual work in progress)**

*Creator/Maintainer · R, Markdown*

*Oct 2020 - Present*

- Pioneered the creation of R's **1st** all-in-one visualization and analysis package for openly available soccer data.
- As of date **Authored 8** functions while working as an open source project to co-author 3 functions. Functions are compatible with **JSON data and specific APIs** while also supporting the use of **webscraped data**.
- Function use cases range from **data wrangling, visualization**, and implementation of complicated analysis such as Markov chain analysis (**supervised machine learning techniques** such as clustering are in the process of being added).
- Helped create an official landing page with Github Pages that experiences an average of **800+** views and **100+** unique visitors per week. Initial release and updates invite upwards of **1000+** views on the package.
- Recognized by various open source projects and package aggregators such as **PySport** and **LibHunt** while being one of the **most in-demand packages** in the soccer analytics community.

### **TimeFlies**

*Backend Developer · Typescript, PostgreSQL, MikroOrm*

HackUTD VIII  
*Nov 2021 - Nov 2021*

- **Led the back-end** to create a responsive schedule creator that allowed multiple users to create tasks, rank them, and place them on a dynamic calendar in real-time.
- Constructed a server for the front-end that successfully connected the user's data to a **PostgreSQL database**.
- **Used MikroOrm in Typescript** to be able to handle data in an object-orientated manner. Scheduler was able to handle upwards of 10 students at the same time.

### **RISE (Risk Identification and Student Evaluation)**

*Developer · Prolog, s(CASP)*

HackReason 2022  
*Jan 2022 - Jan 2022*

- **Led team of 4 to 2nd place finish** by creating an **artificial intelligence model** that allowed teachers and advisors to identify students at risk and deliver a personalized diagnosis for them.
- Utilized UTD's **novel s(CASP) model** to **construct logic** for risk identification and connecting risk identification component to student recommendation system.

### **SimilarityFinder**

*Creator · R, ShinyR*

*Jul 2021 - Jul 2021*

- Created a portable web application in **ShinyR** to showcase analysis results on publicly available soccer data.
- Created novel new models such as the **Clinical Finishing Model** and used **unsupervised machine learning techniques** along with **dimension reduction** to define a **similarity index**.
- Using **factoextra** and performed a **K-Means Clustering** on self-collected data on soccer players.

## ACHIEVEMENTS

---

**Academic Excellence Scholarship** : Accepted into competitive scholarship with 90 % of tuition taken care of.

**Dean's List: Fall 2020, Spring 2021** : Ranked in Top 10 % in Erik Jonsson School of Computer Science

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

**ACM Projects Alumni** : Accepted into program of 5 % acceptance rate and completed a successful project

## PROGRAMMING SKILLS

---

**Programming Languages:** Java , Python , R , Javascript , C++ , Typescript , Unix , Node.js

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

**Relevant Coursework:** Data Struc. and Algo. , Linear Algebra , Probability and Statistics , UNIX , Java

**Languages:** English , Hindi , Spanish