# Abhi **Dhir**

abhidhir.github.io | (512)-938-9147 | adhir@utexas.edu | AbhiDhir | abhi-dhir

## Education

**University of Texas at Austin**  ... *GPA: 3.91*
Pursuing B.S. in Computer Science and Mathematics  ... *Aug. 2018 - Exp. May 2022*
- Relevant Coursework: Operating Systems, Software Engineering, Data Structures, Predictive Analytics, Stochastic Processes

## Work Experience

**NCR**  ... *Dallas, TX*
Software Development Intern  ... *May. 2019 - Aug. 2019*
- Rewrote legacy back-end API of application (Aloha) used by thousands of restaurant managers across the US
- Upgraded API to .NET Core from .NET Framework, and deployed application to Linux Docker running in Azure for better performance
- Ran automated tests using Gatling on API calls such as logging in and executing stored procedures on restaurant databases

**HomeAway**  ... *Austin, TX*
Data Annotator  ... *Jan. 2019 - Jul. 2019*
- Annotated data and worked with text-based natural language processing
- Contributed to team of full time employees with data prep and sequence to a sequence machine learning model

**Applied Research Laboratories**  ... *Austin, TX*
Science and Engineering Apprentice  ... *Jun. 2018 - Aug. 2018*
- Implemented a PostgreSQL database using normalization techniques for the Space and Geophysics Laboratory's inventory
- Created data analysis tools using queries and views to make the previously cumbersome inventory system easy to use
- Automated '.hdf5' system log file generation and parsing for real-time database inserts using C++ and Python

## Projects

**Predicting Stocks using Twitter Sentiments | *Python (scikit-learn, pandas, nltk), Twitter API***  ... *Sep. 2019*
- Utilized sentiment analysis from thousands of tweets to correlate the public opinion of a company with their stock prices
- Used a neural network to make predictions, (still a work in progress)

**Portfolio Website | *React JS, Bootstrap, Github API***  ... *Aug. 2019*
- Personal portfolio website that I created using React and Bootstrap
- Includes API calls to github that dynamically generates a display of my pinned repositories

**Huffman Compression GUI and Backend | *Java, Swing***  ... *May. 2019*
- Bit level encoding algorithm with the ability to compress all file types
- Implements a Huffman Tree and a priority queue

**Measuring Repetition in Speeches using LZW | *Python, RStudio***  ... *May. 2018*
- Analysis of how repetition has increased over time in US presidential speeches
- Implemented the Lempel-Ziv-Welch compression algorithm in order to measure repition of words and phrases

**UTLaundry | *Android Studio, Firebase, Microsoft Vision API***  ... *Oct. 2018*
- Android application which displays the availability of washer/dryers in the residence halls
- Updates laundry status through vision API which detects how much time is left with each machine, completed at HackTX

## Skills

Programming Languages
- Python (numpy, scikit-learn, pandas), Java, C++, C#, Scala, SQL, x86, R

Web/Mobile Development
- Android Studio, React JS, HTML, Bootstrap, Git, LATEX, .NET, AWS, Azure, Firebase

## Extracurricular Activities

**Texas Spacecraft Laboratory (TSL)**  ... *Austin, TX*
Seeker Team  ... *Feb. 2020 - PRESENT*
- Student-driven research group dedicated to designing and building hardware and software for space missions, in conjunction with NASA.

**Association for Computing Machinery at UT Austin (ACM)**  ... *Austin, TX*
Member  ... *Aug. 2018 - PRESENT*
- Focused on the advancement of computer science studies and research through events that serve its members and the community