Robin Ronson

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EDUCATION

TEXAS TECH UNIVERSITY

BS in Computer Science
December 2018 | Lubbock, TX
College of Engineering
Cum. GPA: 3.9 / 4.0

UNITED INDIAN SCHOOL

Grad. May 2014 | Jleeb Al-Shuyoukh, Kuwait

LINKS

Github:// **robrons**
LinkedIn:// **robinronson**
Portfolio:// **robrons.github.io**

COURSEWORK

UNDERGRADUATE

Structures and Algorithms
Operating Systems
Intro. to Artificial Intelligence
Bioinformatics
(Research Asst.)

SKILLS

PROGRAMMING

Proficient:
Java • Python • CSS • HTML
Familiar:
C • C++ • Assembly • JavaScript • LaTeX• Bash
Frameworks and tools:
Android • MySQL • ReactJS • Unix • MongoDB • REST • Redux

EXPERIENCE

TEXAS TECH HPCC | Software Engineer

Jan 2018 - Present | Lubbock, TX

- Incremental development of a Python-based, API-driven test automation tool for **Redfish®**
- Developed a caching mechanism to store HTTP GET requests using JSON serialization, resulting in a $\approx$ 50x speed improvement over the existing tool
- Rebuilt the tool's log representation feature using Angular and Material Design, which led to the easier identification of assertion failures

RESEARCH

TTU BIOLOGICAL SCIENCES DEPARTMENT | Researcher

May 2017 – Present | Lubbock, TX

Working with **Prof. Amanda M.V. Brown** to create **DNAngler**, a Java pipeline used to iteratively improve phasing of strains from complex cellular assemblag s, allowing users to measure evolutionary forces and predict trajectories of infectious diseases.

PROJECTS

FREEZE-B-GONE | Monitoring Progressive Web Application

- Set up push notification using service worker API for vital freeze warnings.
- Used websockets for real time monitoring of the temperature register by the Raspberry Pi device.
- Utilized ReactJS and Redux for building the Front-end side of the web application in a team of 4.

GRATIS-SPOT | WiFi Hotspot Tracker

- Queried Socrata Open Data API on free public WiFi coordinates, resulting in a 30% increase in tracking in comparison to current standards.
- Implemented Bucketing to find the nearest hotspots along a 5 mile radius based on GPS data.

SELF-DRIVING SIMULATION | Machine Learning

- Developed a self-drving car model based on convolutional neural network with 27 million connections and 250 thousand parameters.
- Used Keras on top of Tensor Flow as our machine learning API.
- Accelerated training the model with steering angle and car camera datasets using Cloud TPU.

K-MEANS CLUSTERING | Image Compression

- implemented k-means clustering algorithm in matlab
- to compress an image by reducing its color count to 16
- by computing colors as cluster centroids and replacing each pixel with its nearest cluster centroid color.