

# Robin Ronson

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## EDUCATION

### TEXAS TECH UNIVERSITY

BS IN COMPUTER SCIENCE  
December 2018 | Lubbock, TX  
College of Engineering  
Summa Cum Laude  
GPA: 3.9 / 4.0

## LINKS

Github:// [robrons](#)  
LinkedIn:// [robinronson](#)  
Portfolio:// [robrons.github.io](#)

## COURSEWORK

Operating Systems  
Intro. to Artificial Intelligence  
Bioinformatics  
(Research Asst.)  
Machine Learning  
(Special Topics in CS)  
Theory Of Automata  
Discrete Computational Structures  
Object-Oriented Programming

## SKILLS

### PROGRAMMING

Proficient:  
**Java • Python • HTML5 • CSS • JavaScript**

Familiar:  
**C • C++ • Assembly • R • Bash**

Frameworks and tools:  
**Android Studio • MySQL • ReactJS • UNIX • MongoDB • REST • GCP • Redux • ExpressJS • Bootstrap 4 • NodeJS • TensorFlow • Keras • AWS • Git**

## CONFERENCES

DMTF TECHNICAL SYMPOSIUM  
Topic: Performance gains in Redfish Conformance Checker Tool

DISCL RESEARCH SEMINAR  
Topic: Speaker on RESTful API testing and inference

## EXPERIENCE

### TEXAS TECH UNIVERSITY | FULL STACK DEVELOPER

Jun 2019 - Present | Lubbock, TX

- Spearheaded the transition from SharePoint platform to **MERN** stack, reducing latency by 40% and increasing database admin effectiveness
- Developed full-stack **ReactJS** based web applications which processed, analyzed, and rendered user data visually
- Managed time-sensitive updates, including content changes and database upgrades to **MongoDB**

### TEXAS TECH HPCC | SOFTWARE DEVELOPER

Jan 2018 - Dec 2018 | Lubbock, TX

- Upgraded 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 the easier identification of assertion failures

### TTU BIOLOGICAL SCIENCES DEPARTMENT | RESEARCHER

May 2017 - Dec 2018 | Lubbock, TX

- Worked with **Prof. Amanda M.V. Brown** to create **DNAnGler**, a **Java** pipeline allowing users to predict trajectories of infectious diseases
- Reduced the dimensionality of DNA under mutagenesis dataset using t-SNE, resulting in a clarified visualization of malignant metastasis with **TensorBoard**
- Wrote **Bash** script for constructing a 2D matrix of allele frequency vs. point mutation for transition analysis

## PROJECTS

### FREEZE-B-GONE | TEMPERATURE MONITORING PWA

- Utilized **ReactJS** and **Redux** for building the **front-end** side of a web application that monitors temperature near water pipes
- Set up **push notifications** using service worker API for vital freeze warnings
- Established **WebSocket** connection between the web app and server for real time monitoring of the temperature registered by the Raspberry Pi device

### GRATIS-SPOT | WIFI HOTSPOT TRACKER

- Queried Socrata Open Data API, resulting in a 20% increase in detection of free public WiFi coordinates, in comparison to current standards
- Implemented Bucketing to find the nearest hotspots along a 5 mile radius based on the GPS data

### SELF-DRIVING SIMULATION | NEURAL NETWORK

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