# Ali Unwala

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#### **EDUCATION**

## The University of Texas at Austin: Master of Science

Electrical and Computer Engineering, Research Focus: Robotics and Artificial Intelligence, GPA 3.8

#### The University of Texas at Austin: Bachelor of Science

Electrical and Computer Engineering, GPA 3.67

## **WORK EXPERIENCE**

## Health Startup: Senior Full Stack Software Engineer

2023 - 2024

- Conducted user studies to architect and implement a website with authentication and user management for customers to book and schedule appointments.
- Technology: React, CSS, HTML, VSCode, Typescript, Node.js, Docker, React Hook Form, Zod, js-cookie

#### IBM Design: Senior Full Stack Software Engineer

2020 - 2023

- Collaborated with design and accessibility experts to contribute to a <u>suite of web tools</u> providing guidance to ~300k
   IBM employees on making products accessible to people with disabilities
- Technology: React, Javascript, CSS, HTML, JSX, VSCode, Typescript, Node.js, Docker, Gatsby, and CouchDB, axios
- Related Projects (see below): ibm.com/able, IBM Equal Access Accessibility Checker

## IBM Research: Senior Full Stack Software Engineer

2018 - 2020

- Designed and developed an event driven architecture to check the accessibility on web pages
- Technology: Javascript, CSS, HTML, VSCode, and Node.js

## IBM Watson: Cognitive Robotics Technical Lead

2015 - 2018

- Led a team focused on finding value for IBM at the crossroads of cognitive computing and robotics and grew this team from 2 people to 20 people all working toward building cognitive AI embodiments
- Consulted and implemented robotics and machine learning prototypes to create value in over 10 Fortune 500 companies
- Technology: REST, Python, Matlab, Vim, Unix/Linux, CouchDB, ROS, PCL, OpenCV, Watson AI APIs, NAO Robot, Pepper Robot
- Related Projects (see below): <u>Robotic Concierge IBM Watson x Hilton, IBM Project Intu, IBM Chef Watson</u>
  Robot

#### University of Texas at Austin: Graduate Teaching Assistant

2014 - 2014

- Conducted lectures for CS 378 Autonomous Intelligent Robotics and taught students the Robot Operating System (ROS) on a <u>segbot platform</u>
- Technology: Python, MATLAB, Vim, Unix/Linux, Robotics Operating System, Point Cloud Library, Open Computer Vision (OpenCV), Segbot Robot

## Intel: Graduate Technical Intern

2011 - 2014

- Verified mobile processors (Atom, Celeron and Pentium) before they were sent for fabrication (pre-silicon)
- Technology: Java, C++, Assembly, C, Vim, Unix, TCL, Verilog, Perl, VHDL

## **PROJECTS**

ibm.com/able: A site for IBMers building accessible products within the company

- Implemented over 90% of the front end (in 2022) with React & Node deployed with docker containers
- This project was featured in Forbes, InfoQ, betanews, linux.com, and ZDNET.

**IBM Equal Access Accessibility Checker:** A web extension that allows users to automatically check for accessibility issues on any websites they own

- Planned and implemented dynamically drawn visualizations that highlight accessibility bugs on a webpage.
- This project was featured in <u>VentureBeat</u> and <u>CSUN</u>.

Robotic Concierge - IBM Watson x Hilton: A robotic concierge to help Hilton customers navigate the hotel and the surrounding area using natural language.

- Consulted and built a robotic concierge using Watson APIs, natural language processing, and speech to text.
- This project was featured in <u>Fox News</u>, <u>The Verge</u>, <u>Ars Technica</u>, <u>Fortune</u>, <u>USA Today</u>, <u>Time</u> and <u>additional</u> publications.

IBM Chef Watson Robot: An application that allows the robot to act as an active kitchen assistant that will explore ingredients with a user and then create a dynamically generated recipe for them to cook

- Collaborated with the Chef Watson team to bring Chef Watson to the NAO robotics platform
- This project was featured in <u>The Guardian</u>, <u>Washington Post</u>, <u>The New Yorker</u>, and <u>bon appetit</u>.

## **AWARDS**

- Eagle Scout Boy Scouts of America
- 1st Place, UT Senior Design Competition
- 1st place, UT ECE 445L Design Competition
- University Honors University of Texas at Austin