

# NEERAJ DHARMADHIKARI

Email: neerajd24@gmail.com  
Phone: 408.427.2417  
Website: <https://www.neerajd.xyz/>

## EDUCATION

### University of California, Irvine

M.S. in Computer Science | September 2020 - Present  
GPA: 3.55 | Expected Graduation: March 2022

### University of California, Irvine

B.S. in Computer Science | September 2018 - June 2020  
GPA: 3.72 | Specialization: Artificial Intelligence

## WORK EXPERIENCE

### Software Intern - Portal Platform

Guardant Health Inc. | Summer 2021 (In progress)

- Developing and training an AI Chatbot using **Google Dialogflow (NLU)** and the combined features of **React & Ruby on Rails** in order to provide users with 24-7 assistance and ultimately ease the load off our support team
- Integrating the chatbot into Guardant backend by designing a **RESTful API** in **Node.js** that can fetch the correct results for any user query, then creating the documentation per company's methodology

### Software Engineering Intern - Full Stack

Bizmatics Inc. | Summer 2020

- Replaced Bizmatics's 8-year-old UI components with modernized web interfaces that meet today's standards of responsive UI/UX using **Figma** and **Java Server Pages**
- Created a gateway of SMS texting using **Java** for doctor-patient communication using a cheaper web service that I discovered, saving the company over 50% in texting fees

### Software Engineering Intern - Database

Bizmatics Inc. | Summer 2019

- Built a robust data import program using **JDBC & Microsoft SQL** that can map over 30K patient-data-entries into our software overnight
- Coordinated with new clients to help them seamlessly transition into using Bizmatics's software 'Prognosis'
- Designed filterable reports for EMR tracking utilized by the health clinics

### Teaching Assistant - Python & x86 Assembly Language

De Anza College | Fall 2017 - Summer 2018

- Assisted Professor in teaching students, and making video tutorials for IDE set-ups, and debugging that can be found here: <https://bit.ly/2UIwfGI>
- Held office-hours in the computer lab to answer questions visiting students had about their assignments for 3 days a week for 4 quarters

## SKILLS

Python (Most Experience)  
Java  
JavaScript & TypeScript  
C & C++  
HTML & CSS  
SQL  
x86 & MIPS Assembly

## TOOLS

Eclipse Java  
Visual Studio  
Android Studio  
Jupyter Notebook  
Microsoft SQL  
Ubuntu Linux  
VirtualBox  
Git/Github  
Angular  
Figma  
React  
Postman  
RubyMine  
Adobe Suite

## ACADEMIC RESEARCH & DEVELOPMENT

### Personal Informatics Everyday (PIE) Lab

Prof. Daniel Epstein | Winter 2021 - Present

- Designing a cross-platform application using **ionic & React** to help doctors and patients collaborate on tapering medicine dosage
- Conducting interviews with doctors & patients to understand specifications and use-cases

## PROJECTS

### Distracted Driver Detection

Using **PyTorch** and **ResNet18** model with 22.4K images of distracted drivers, built a detector that can classify these distractions with validation accuracy of 99.7%

### "Specifit" - Mobile Application for Healthy Eating

**Android** app (**Java**) that assembles a personal model for a user based on preferences and geolocation to recommend the healthiest places to eat nearby

### Personal Relational Database

Created using **C++**: a Paged-File Manager, Record-Based-File Manager, a Relational Manager, Index Builder, and a Query Engine that mimics the behavior of a basic RDBMS

### Face & Object Detection

With a ~93% testing accuracy and implementing **Python's Hogvis & Skimage libraries**, developed and trained a program for detecting faces as well as traffic signs

### Personalized Search Engine

**Python**-based Search Engine program that builds an inverted index from a corpus of UCI hyperlinks that get crawled, tokenized, and indexed. For front-end: used **Materialize CSS & JS**

## LINKS

Github - <https://github.com/NeerajDharmadhihari>

LinkedIn - <https://www.linkedin.com/in/neeraj-dharmadhihari/>