

# ARNAV DHIMAN

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Computer science master's student with 3 years of industrial experience as a full stack developer in an MNC, seeking full time software development engineer opportunities.

## EDUCATION

### Master's in Computer Science (M.C.S.)

Arizona State University, Tempe, AZ

GPA: 3.83/4

May 2021

### B.Tech., Computer Science and Engineering

National Institute of Technology, Hamirpur, India

CGPA: 7.43/10

May 2016

## TECHNICAL SKILLS

**Programming Languages:** Python, SQL, JavaScript, Express Node.JS, C#, MATLAB and C++

**Database:** MS SQL Server, PostgreSQL and MongoDB

**Software Methodologies:** Agile

**Other:** Visual Studio, Microsoft Excel, PowerPoint and Word

## PROFESSIONAL EXPERIENCE

### United Technologies Corporation (Hyderabad Research and Design Center), India: Full Stack developer July 2016 – May 2019

- Implemented diagnostics algorithms and web portal for refrigerated trucks and containers' I.O.T. application. The web portal was implemented using **C# .NET MVC framework** and the algorithms were implemented in **SQL**.
- Filed a patent** through UTC in the US patent office in Feb 2018 relating to the use of machine learning for improving the efficiency of the human and self-driven refrigerated trucks.
- Implemented a Research center portfolio management web portal under an aggressive schedule. The team's efforts were well received, and we were awarded the Titan award for it.
- Using the **C# MVC framework, jQuery, HTML/CSS and SQL implemented** a binary file parsing tool. It allowed users to upload and process a proprietary binary file and the data of the parsed file was stored in a database for analytics.
- Incorporated agile** methodologies in all the projects for application lifecycle management with the help of IBM's RTC tool.

## PROJECTS

### Health Picker July 2020 – Current

- Developing an application to provide recommendations for healthy alternatives for everyday food products.
- The application uses a **Node.JS** backend and a chrome extension frontend. It is in its alpha phase of development.

### Insulin based classification for CGM devices Feb 2020 - June 2020

- Implemented a pipeline to train a machine on extracted features from raw CGM data in python. Used PCA for dimensionality reduction and used K folds testing on SVM, XG-Boost, and Random Forest classifiers.
- Accuracy of 95% was achieved using XG-Boost.

### Semi-Auto Digital Image segmentation using Snakes August 2019 - November 2019

- Implemented dual snakes-based image segmentation using MATLAB image tool and a GUI for the application on MATLAB GUI. This project was aimed to calculate the thickness of Carotid intima-media adventitia on MRI images.
- The resulting segmentation technique was 72% accurate.

### MNIST handwritten digits recognition August 2019 - November 2019

- Implemented logistic regression, naïve Bayes, convolutional neural networks, and k-means clustering algorithms from scratch on features extracted from the MNIST images.
- Accuracy of 97.5% was achieved using ImageNet.

### Scaling AKS algorithm by leveraging multi-threading August 2019 - November 2019

- Performed a comparative group study of the primality testing algorithm i.e. AKS algorithm on single and multi-core processors.
- Achieved 3X speed on a quad-core i7 Intel processor than normal serial execution.

## ACTIVITIES

- Won sponsor award in **Sunhacks Hackathon** (best use of Transposit) at ASU. **Sept 2019**
- Participated in IBM's code response Hackathon at ASU. **Sept 2019**
- Participated in Hackathon UTC organized by United Technologies India division. **July 2018**
- Participated in Microsoft's imagine cup 2015 and received honorable mentions in the pitch video challenge. **Nov 2015**