# **Arjun Chavan**

<u>achavan2@jh.edu</u> | +1 (650) 338 9658 | <u>https://github.com/ArjunChavan219</u> https://linkedin.com/in/arjun-chavan-9936041a6 | https://arjunchavan219.github.io/bio/

#### **EDUCATION**

Johns Hopkins University, Whiting School of Engineering, Baltimore, MD

Master of Science in Engineering, Computer Science Courses - Artificial Intelligence, Neural Networks

Great Learning with Great Lakes University, Online

Post Graduate Program in Data Science Modules - NPV, EDA, Statistics for ML, Supervised ML, NLP

Mumbai University, Don Bosco Institute of Technology, Mumbai, India

Jul 2021

Bachelor of Engineering (Computer Engineering) Courses - DSA, Big Data & Analytics, Machine Learning

#### WORK EXPERIENCE

## Cimpress, Mumbai, India, DevOps Engineer

Aug 2021 - Jul 2023

#### **DevOps Engineering**

- Managed 75% of the AWS backbone architecture like SQN, SNS, Codebuilds, Codepipelines and EKS clusters.
- Supervised projects and brainstormed new ideas making implementation of task more efficient by at least 50%.
- Automated CI/CD (Continuous Integration / Continuous Deployment) pipelines making them 100% secure.
- Managed key performance indicators (KPIs) with the aim of enhancing website performance.
- Mentored 4 new team members through knowledge-transfer sessions and guided through company frameworks.

## Frontend and Backend Engineering

- · Dealt with React.js and Node.js application development, validation and performed unit testing in Mocha and Jest.
- Collaborated closely with developers from 6 squads and handled software development, deployment, and version control.
- Improved code quality using SonarCloud and generated project documentation for 80% of major projects.
- Completed 100% of assigned projects and tickets and played a pivotal role in a company-wide migration initiative.

#### Dial4242 Uber for Ambulances. Mumbai, India Software Intern

Jun 2019 - Oct 2019

- Used Google Assistant to request an ambulance from the Dial4242 dashboard, enhancing client accessibility by 75%.
- Collaborated with Actions on Google to gain insights into the functionality of Google Assistant.
- Integrated 60% of the company's API microservices and established a connection with the Firebase database.

#### **PROJECTS**

## **Undergraduate Projects**

- Simulators Quine McClusky Method (C), Breadboard (JFrame) and Expression Converter (JavaFX).
- Android Development Designed multiple mobile applications on Android Studio using Java and Kotlin.
- Little Go Player Deployed an AI Bot to play Little Go Puzzle using Alpha-Beta Pruning giving 80%-win rate.
- Robotics, Industrial Automation & IOT Course Created a robot to play football; Used ESP8266 for IOT multiple projects.
- **Predicting Covid-19 Cases** Used Machine Learning by training an LSTM model and connected it with Front-end using Flask and HTML. Achieved 85% precision rate in predicting number of positive COVID-19 cases in India, Germany, Italy, Spain.

## **Drone Route Planning – ISRO** (Smart India Hackathon)

- Engineered an innovative algorithm to plan 70% more efficient drone route which empowered drones to make real-time adjustments considering multiple constraints like geography, drone battery, fuel stations, and obstacles.
- Drove interactive visualizations by creating simulations and animations using AngularJS, HTML, CSS, and Google Maps API to picture planned routes and enhance user experience (<u>Link</u>).

#### **PEGASUS**

- Led Software Subsystems in Can-Sat Competition organized by American Astronautical Society (AAS).
- Designed circuitry and programmed micro-controllers to operate sensors and trigger flight modules.

#### **HTIP Algorithm**

- Developed hybrid parallel processing algorithms and deep learning models to increase text compression ratio by 30% and image compression ratio to 300:1 compared to existing standard algorithms.
- Used Cuda on GPU to achieve a speed up of 25.094 for LZSS and 26.08 for Huffman compression.

## **SKILLS**

Softwares	Microsoft Word and Excel, Adobe Photoshop, Macromedia Flash, Android Studio
Platforms	AWS, SonarQube, BitBucket, GitHub, Atlassian, Jira, Linux/Unix, CUDA
Management	Agile (Scrum, Kanban), Sprint Planning, Continuous Improvement, Iterative Development
Tools and Frameworks	Hadoop, SonarQube, Kubernetes, Docker (Containerization), Terraform
Databases	MySQL, DynamoDb, Firebase, MongoDb
Languages	C, C++, Java, Kotlin, VB, HTML, CSS, JavaScript, PHP, Python, Node JS, R, iOS Swift
Data Science Tools	Excel, Tableau, NumPy, Pandas, Matplotlib, Seaborn, PyCaret, PyTorch, TensorFlow