

AYUSH ASHISH SHIRSAT

161 Bigelow Street, Unit #2, Brighton, MA 02135 (+1) 857-928-2698 ayushshirsat96@gmail.com
LinkedIn: <https://www.linkedin.com/in/ayush-shirsat> **Portfolio:** <https://ayush-shirsat.github.io>

Software Engineer with experience in designing Machine Learning algorithms that translate complex data into intuitive insights and visualizations. Can work independently and in cross-functional teams to provide analytical reports and data models to help organizations make critical strategic decisions.

EDUCATION

Boston University College of Engineering Master of Science in Electrical and Computer Engineering (Specialization in Data Analytics)	Sep 2018 - May 2020
Birla Institute of Technology & Science (BITS), Pilani - Dubai Campus Bachelor of Engineering (Honours) in Electronics & Communication Engineering	Aug 2014 - May 2018
Springboard Certification - Machine Learning Engineering Career Track	Jan 2021 - Present

EXPERIENCE

Blue Cross and Blue Shield of Florida, Jacksonville - Software Engineer On Contract via M3BI, LLC	Aug 2020 - Present
<ul style="list-style-type: none">Implemented Logistic Regression and Random Forest in Python to detect potential customer defection with 73% precision to help company retain customers and save around \$500 Mil in revenue/yearBuilt Time Series Models using Seasonal-ARIMA and Holt-Winter to forecast New Health Insurance Enrollments for the year 2021Performed data sanity checks on SQL Server tables and used that data to build dashboards in PowerBI and TableauDesigned web-based dashboards using Flask, Plotly, HTML, CSS and JavaScript	
City of Haverhill, Haverhill - Data Science Consultant	Sep 2019 - Dec 2019
<ul style="list-style-type: none">Worked via BU Spark of Boston University to communicate with client - Director of Public works, Haverhill, MAPerformed exploratory data analysis using Python libraries like Seaborn, Matplotlib and Pandas to provide insights into 311 non-emergency service dataPredicted time taken to resolve user complaints by performing regression using SVM	
Boston University, Boston - Grading Teaching Assistant	Sep 2019 - Dec 2019
<ul style="list-style-type: none">Graded Assignments and tutored a class of 50 students for course Computational Linear AlgebraHelped students to complete their coding assignments using MATLAB	
Mahindra & Mahindra Ltd, Mumbai - IT Intern	Jun 2016 - Aug 2016
<ul style="list-style-type: none">Helped the company design network infrastructure on a new floor in the building and tested its simulation using Cisco Packet TracerPresented a technical report on Blue Coat proxy and its utility in IT environment	

SOFTWARE SKILLS

LANGUAGES: Python, SQL, HTML/CSS

LIBRARIES: NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, Plotly, TensorFlow, Keras, PyTorch, OpenCV, PySpark

SOFTWARE/TOOLS: Git & GitHub, SQL Server, PostgreSQL, MongoDB, MATLAB, Jupyter Notebooks, Microsoft Excel, Power BI, Tableau, Windows and Linux

PROJECTS

Pneumonia Detection	Jan 2021 - Present
<ul style="list-style-type: none">Built models like Masked-RCNN and ChexNet using TensorFlow in Python to detect and localize Pneumonia in Chest X-ray imagesBuilt a Flask Application for users to upload Chest X-ray images and deployed it using AWS EC2The application returns the diagnosis of Pneumonia and its location using bounding boxes based on opacity in chest images	
Analysing EfficientNets in Grading Diabetic Retinopathy	Jan 2020 - May 2020
<ul style="list-style-type: none">Implemented a family of state-of-the-art CNN models called EfficientNets using TensorFlow in Python to detect severity of Diabetic RetinopathyAchieved Quadratic Weighted Kappa score of 85.6% in grading Retinopathy which surpassed human score of 78%	
Twitter Analysis	Sep 2018 - Dec 2018
<ul style="list-style-type: none">Streamed tweets using Tweepy API in Python to extract tweets with imagesUsed Google Cloud Vision API to caption the images and stored top 5 media descriptionsBuilt databases in MySQL and MongoDB to store Tweet, User ID, media file and media description	