CHARLES BUSHROW

Data Scientist

DETAILS

📱 (434) 409-2336

✉ charlie.bushrow@gmail.com

in linkedin.com/in/bushrow

○ github.com/bushrow

🌐 bushrow.xyz

SKILLS

Data Analysis

Machine Learning

Predictive Modeling

Data Visualization

Automation

Agile Development

TOOLS

Python

SQL

HTML/CSS/JavaScript

VBA

R

Java

Git/SVN

Azure/AWS

PowerShell/Bash

Tableau

Microsoft Office

CERTIFICATIONS

Microsoft Azure Fundamentals

IBM Data Science Professional

ICAgile Certified Professional

👤 PROFILE

Data Scientist with 4 years of high-impact solution delivery experience, which includes: visualization/dashboarding, automation, machine learning, modeling and simulation, and operations research. Currently pursuing a Master's Degree in Analytics part-time while continuing to out-perform expectations professionally.

💼 WORK EXPERIENCE

Lead Data Scientist, Booz Allen Hamilton

Jul 2018 - Present | Arlington, VA

Empowered clients to succeed in mission-critical operations and strengthened decision-making processes by leveraging data. Created tools, developed pipelines and applied machine learning techniques to simplify workflows and expand the power of available data.

Client Impact
- Responsible for monthly aggregation and analysis of global flight data for the United States Air Force representing $8 billion in defense resource allocation annually
- Determined and effectively communicated the viability of $500 million reallocation of defense funding by performing sensitivity analysis and downstream impact analysis, then organizing findings into a cogent argument in support of the decision
- Delivered analytical findings to clients and presented storyboards that explain the insights and best courses of action gleaned from the results

Machine Learning Development
- Derived features in historical Air Force data, performed feature selection, then trained, tested, and selected machine learning models for predictive and descriptive analyses of global force readiness
- Led development of computer vision models spanning classification, object detection, and semantic segmentation using Fast.ai and PyTorch
- Increased accuracy from 73% to 98% for aircraft image classification model with 20+ disparate categories by training on varied perspectives, skews, and lightings
- Deployed trained computer vision models and designed web application that allowed for upload of images and interaction with models

Technical Modernization Efforts
- Developed a pipeline in Python to automate ingestion, cleaning, and visualization of a data feed, reducing process time by 98% and creating three days per month of time savings, while also increasing accuracy and reliability
- Ported legacy Excel tools and VBA into Python scripts and dashboards, then deployed to a cloud solution, expanding access and availability for analysis team
- Provided subject matter expertise for the development and delivery of data science courses taught to 1500+ federal employees as a key piece of the IC agency's modernization effort
- Facilitated team collaboration and monitored tasking through JIRA, using Scrum and Agile methodology
- Maintained GitHub repositories for tools and code/scripts that are used by various teams

🎓 EDUCATION

M.S. in Analytics, Georgia Institute of Technology

Jan 2020 - Dec 2022 (expected) | Atlanta, GA

B.S. in Industrial & Systems Engineering, Virginia Tech

Aug 2013 - May 2018 | Blacksburg, VA

Minors in business and psychology