Justin Barry

757.268.9099 • justin.barry.e@gmail.com
https://www.linkedin.com/in/justin-barry-e/

OBJECTIVE

Data scientist with an MS in Computer Science and 10+ years of experience delivering creative software solutions. I am experienced in conducting research and implementing machine learning solutions to solve business problems in the real world.

PROFESSIONAL EXPERIENCE

Data Scientist **Aug 2022 – Present**
Barry Solutions LLC

Due to my lifelong passion for professional martial arts, I made the decision to leave my full-time position with Amazon and focus solely on my career as a professional MMA fighter. This required my complete dedication and focus in order to properly prepare for events at the time.

During this period, I also took on some contracting work for a friend. I developed an innovative model for an MMA podcast, which utilized fighter data from ufcstats.com. Using my expertise in machine learning, I created a program that processed and analyzed the data to accurately predict the outcomes of UFC fights. This project allowed me to stay connected to my passion for martial arts while also utilizing my skills as a machine learning scientist.

Machine Learning Scientist **May 2019 – July 2022**
Amazon.com – Remote

As an experienced data scientist with an advanced degree in data science, I have a proven track record of devising and managing data-driven projects that further business interests in the telecom domain. At Amazon Prime Video, I led AI and machine learning efforts to optimize cover art for titles in the catalog, demonstrating my expertise in advertisement optimization and increasing worldwide streams by 2.9%.

In this role, I collated and cleaned data from various sources, selected and employed advanced statistical procedures, cross-validated models, and produced non-technical reports that detailed the successes and limitations of each project. My proficiency in a range of techniques and tools enabled me to excel in my role, including using PyTorch, scikit-learn, Pandas, PySpark, and AWS SageMaker to research and experiment with ML models offline.

I advised on AB testing, determined statistical power, and used a variety of methods such as deep learning, reinforcement learning, logistic regression, NLP, computer vision, and other classic ML models to predict title cover art for a customer. Finally, I developed a clustering model of Prime Video titles using Latent Dirichlet Allocation and Wasserstein Autoencoders to create topic-model embeddings of customer review data.

Senior Software Engineer **2013 – 2017**
CSRA Inc – Falls Church, VA

As a senior software engineer at CSRA Inc, I led the development of robust and deployable enterprise applications in an agile environment, mentored junior developers, and acted as a technical lead for multiple major applications. My contributions were recognized through an award of excellence for my work on the International Terrorist Victim Expense Reimbursement (ITVERP) application. I developed and demoed prototypes using new technologies, such as creating REST services and Java libraries using the Java stack, designing a database testing library using a Docker client and Liquibase, and demoing a Java Spring-based rules engine prototype. I also assisted in

mid-tier application server management, implemented RESTful and SOAP web services across multiple platforms, and utilized Spring, Hibernate, REST, and SOAP technologies to create enterprise-level applications.

Software Engineer **2011 – 2013**
Booz Allen Hamilton – Herndon, VA

As a software engineer at Booz Allen Hamilton, I developed and maintained enterprise web applications and utility software, created custom algorithms to solve coding problems, and resolved application bugs. I also managed and mentored junior consultants, secured government clients, and assisted in research efforts. My contributions led to an award of excellence for my work on the Talent Review Tool, and I actively participated in various design sessions, code reviews, and sprint planning/backlog-grooming sessions. Additionally, I implemented SOAP web services and contributed to mobile rapid prototyping effort

EDUCATION

Master of Science in Computer Science, **May 2019**
Gem Fellow
University of Central Florida – Orlando, FL

Bachelor of Science in Computer Science and Mathematics, **May 2011**
Member of Pi Mu Epsilon Honorary Mathematics Society
Christopher Newport University – Newport News, VA

PUBLICATIONS

Diagnosing Schizophrenia: A deep learning approach. BCB '18: Proceedings of the 2018 ACM International Conference on Bioinformatics, Computational Biology, and Health Informatics. August 2018 Pages 549. https://dl.acm.org/doi/10.1145/3233547.3233658

COMPETITIONS & PROJECTS

2nd highest scoring model accuracy. 2018 CFE Federal Credit Union Lending Analytics Competition. https://github.com/shere-khan/cfe_competition/blob/master/report.pdf

GitHub repository https://github.com/shere-khan/machine_learning

SKILLS

Data science/machine learning, advertisement optimization, A/B testing, Bayesian statistics, deep learning, regression analysis, multi-armed bandits, distributed computing, AWS, Natural language processing, statistical modeling, sentiment analysis, neural networks, computer vision, topic modeling, distributed computation, Apache spark, functional programming, computer vision, reinforcement learning, optimization, gradient boosting, Keras, PyTorch, pandas, random forest EMR, Apache Spark, R, Jupyter, PySpark, multi-armed bandits, A/B testing, data analysis, REST, AWS SageMaker Studio, Jupyter notebooks, logging policies, Java Spring, Java Struts, Node JS, Hibernate, JavaScript, Python, C, Scala, functional programming, SQL, Tomcat