Jessica Bean

Email: jessicabbean@gmail.com | **Phone:** (206) 591-0312

LinkedIn: linkedin.com/in/jessicabbean | **Portfolio:** jessicabriandebean.github.io

PROFESSIONAL SUMMARY

Strategic leader with 10+ years driving operational excellence and data-informed decision-making in federal government and defense sectors. Proven track record managing cross-functional teams, delivering measurable business impact, and translating complex insights into executive strategy. Expertise in process optimization, stakeholder management, and scaling analytics solutions that generate millions in cost savings.

PROFESSIONAL EXPERIENCE

Senior Data Scientist

Naval Sea Systems Command | October 2023 – September 2025

- Led team initiative to automate system classification processes, reducing manual effort by 70% within 3 months and improving operational forecasting efficiency across defense programs
- Developed predictive model for equipment lifecycle management, reducing operational risks by 25% within 6 months and enabling proactive resource allocation
- Built executive dashboard and data product strategy that increased stakeholder engagement by 60% in 4 months, driving alignment on strategic priorities
- Authored AI-driven white paper forecasting supply chain disruptions for multi-billion dollar acquisition programs, informing resilience planning and budget allocation
- Created training materials and mentored teams on analytics best practices, improving organizational data literacy and decision-making capabilities

Lead Data Scientist & Researcher

Naval Sea Systems Command | January 2019 – September 2023

- Managed transition to modernized data architecture, accelerating analytics delivery and enabling collaborative machine learning across distributed teams
- Led cross-functional teams and mentored junior analysts, fostering culture of data-driven decision-making

- Spearheaded enterprise data infrastructure transformation, improving data accessibility and analytics velocity across organization
- Designed analytics pipelines that boosted forecasting accuracy by 75% in 6 months, directly informing R&D investment decisions
- Created predictive analytics dashboard and data sourcing strategy that provided early warning system for supply chain risks, improving fleet readiness
- Built interactive scenario analysis tools that reduced decision-making turnaround time by 50%, enabling rapid executive response
- Translated complex technical requirements into scalable solutions across multiple Navy programs

Operational Research & Data Analytics

Naval Sea Systems Command | June 2017 – January 2019

- Designed forecasting tools using advanced analytics that optimized workload distribution and resource allocation across fleets
- Created partner-facing specifications and documentation for data delivery, ensuring seamless cross-organizational collaboration
- Defined success metrics and iterated reporting based on stakeholder feedback, ensuring alignment with business objectives
- Built real-time analytics platform for asset management that reduced response time by 6 months, delivering $10M in cost savings
- Developed data-driven acquisition strategy that increased operational efficiency by 30% for naval fleet operations

FEATURED PROJECTS

Economic Indicator Forecasting Platform

Built time series forecasting tool predicting unemployment, inflation, and GDP with 2.3% accuracy. Deployed interactive dashboard serving monthly users with automated insights.

Workload Optimization Dashboard

Developed resource allocation tool using optimization algorithms and game theory, reducing partner handling time by 30% and balancing workload distribution.

Patent Technology Forecasting

Led NLP-based analysis to classify emerging technologies and predict adoption timelines, shaping future submarine system upgrades and organizational AI strategy.

Obsolescence Forecast Engine

Created end-to-end machine learning solution for customer segmentation with 85% accuracy, providing actionable business recommendations that could increase campaign effectiveness by 25%.

EDUCATION

Ph.D. INFORMATION SCIENCES in Data Science

Naval Postgraduate School | January 2021 – Present (transferring to UW Industrial Engineering)

MASTER'S DATA SCIENCE in Business Analytics

Pennsylvania State University | January 2018 – January 2020

BACHELOR'S MARKETING & ECONOMICS in Business Analytics

California State University Fullerton | August 2012 – January 2015

CERTIFICATIONS & CLEARANCES

• Mathematics for Machine Learning and Data Science Specialization (2025)
• Security Clearance: Secret/Current (as of December 2025)

CORE COMPETENCIES

Leadership & Strategy: Cross-functional team management, Executive communication, Stakeholder engagement, Strategic planning

Business Impact: Process optimization, Cost reduction, ROI analysis, Performance metrics

Analytics & Tools: Python, R, SQL, Tableau, Power BI, Cloud platforms (Azure, AWS), A/B testing, Forecasting