




STACEY BRANDSMA

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technology strategy & innovation senior manager ~ amgen msc computer science, msc analytics, bsc biology

I am the Technology Strategy & Innovation Senior Manager for Global Patient Safety at Amgen, where I drive the strategy and development of AI-enabled solutions to improve pharmacovigilance and patient safety. With a strong foundation in data science and machine learning, I now focus on translating complex safety needs into practical, scalable digital products — from problem discovery through MVP delivery.

My work bridges precision medicine, public health, and applied AI. Before moving into product leadership, I spent several years building and deploying machine learning models in healthcare and biotech, a background that continues to shape my approach. I hold MS degrees in Computer Science and Analytics from Georgia Tech, and a BS in Biology.

Skills

Product Management:	Product Strategy, Roadmapping, OKRs, MVP Development, Product Discovery, User Research, Agile Product Lifecycle, Stakeholder Engagement, Cross-functional Leadership, Prioritization Frameworks, Go-to-Market Planning
Programming:	Python, R, SQL, Bash/Zsh, Git
Methodologies:	Machine Learning, Natural Language Processing, Image Analysis, Deep Learning, Big Data Analytics, Simulation, Bayesian Statistics, Causal Inference, Business Analytics
Areas of Expertise:	Patient Safety, Precision Medicine, Digital Health, BioPharma, Healthcare AI, Public Health Informatics, Biomedical Data Science, Program Management

Education

- 05/2024 **Master of Science in Computer Science**, *Georgia Tech*, *GPA: 4.0*
 - Artificial Intelligence, Deep Learning, Big Data for Healthcare, AI Ethics, Bayesian Statistics, Knowledge Based AI, Software Development Process, Human Computer Interaction, Machine Learning and Data Science Tools
 - Independent Study: Predictive Modelling for Diabetes, Obesity, and Sleep Apnea
- 05/2020 **Master of Science in Analytics**, *Georgia Tech*, *GPA: 4.0*
 - Machine Learning, Simulation, Data and Visual Analytics, Business Data Analytics, Introduction to Modelling, Introduction to Computing, High Dimensional Data, Regression Analysis
- 01/2018 **Micro-Masters in Data, Economics, and Development Policy**, *MIT*
 - Data Analysis, Economics, Experimental Design, and Policy Analysis
- 04/2013 **Bachelor of Science (Honors) in Biology**, *Kings University*
 - Certificate in International Development Studies
 - Elected VP of Students' Association
 - Laurence Decore Student Leadership Award from Government of Alberta
 - Senior Thesis: Survival of murine norovirus and F-RNA coliphage MS2 on pork during storage and retail display published in International Journal of Food Microbiology

Experience

- 02/2025–present **Technology Strategy & Innovation Senior Manager, Amgen**
- **AI-Driven Document Authoring Platform**
 - Leading the development of an intelligent modular system to automate the creation of periodic safety reports and other regulatory safety documents.
 - Leveraging generative AI and document intelligence to reduce manual workload and improve consistency across all safety documentation.
 - **Safety Assessment Generation Engine**
 - Designing a platform that improves traditional safety signal assessment using AI and data-driven methods.
 - Integrating structured and unstructured data to support faster, more informed signal detection, evaluation, and reporting.
 - **Safety Risk Prediction & Prevention**
 - Developing unified machine learning models to predict product-level safety risks and likelihood of adverse events.
 - Identifying causal risk factors in specific patient populations to enable earlier intervention and proactive risk management.
- 07/2021–02/2025 **Principal Data Scientist, Amgen**
- Strategic & Domain Leadership:
 - Lead AI Product Management for Global Patient Safety, aligning digital strategy with pharmacovigilance innovation.
 - Co-led enterprise AI taskforces for Obesity, Rare Disease, and Safety; defined use cases and roadmap priorities.
 - Key contributor to Amgen's precision medicine strategy via executive workshops on future AI capabilities.
 - Product & Technical Execution:
 - Led discovery and MVP delivery for AI tools in safety signal evaluation, trial optimization, and document automation.
 - Built AI-driven executive tools using NLP for summarization, Q&A, topic modeling, sentiment analysis, and forecasting.
 - Developed ML models for osteoporosis detection and scaled deployment strategies.
 - Integrated computer vision pipeline for analyzing cell painting images.
 - Authored internal white paper on clinical AI adoption across therapeutic areas.
 - Collaboration & Culture Building:
 - Vice Chair for Amgen's Data Science Symposium; led AI Demo Days and Tech Talks to scale AI awareness.
 - Co-led AI Learning Lab to expand organizational AI literacy.
 - Led AI mentoring program; improved mentor matching with ML and supported junior team growth.
 - Promoted cross-functional collaboration through journal clubs, pilots, and innovation showcases.
- 03/2021–07/2021 **Data Scientist 2, Parsyl**
- 04/2020–03/2021 **Data Scientist, HCA Healthcare**
- 06/2018–04/2020 **Data Science Co-Op, Johnson & Johnson**
- 09/2014–10/2017 **Monitoring and Evaluation Officer, MCC**