


STACEY BRANDSMA

 staceybrandsma.github.io/

 [stacey-brandsma/](https://www.linkedin.com/in/stacey-brandsma/)

 [staceybrandsma](https://github.com/staceybrandsma)

principal data scientist ~ amgen
msc computer science, msc analytics, bsc biology

I am a principal data scientist with several years of experience analyzing data and building and deploying machine learning models in large healthcare and biotech companies, with a passion for analyzing data to improve patient's lives. My area of interest and expertise is at the intersection between precision medicine, public health, and data science and their applications in improving patient care and treatments. I have both a Master of Science in Computer Science and Master of Science in Analytics from Georgia Tech, in addition to my Bachelor of Science in Biology.

Skills

- Programming: Python, R, SQL, Bash/Zsh, Git
- Methodologies: Machine Learning, Natural Language Processing, Image Analysis, Deep Learning, Big Data Analytics, Simulation, Bayesian Statistics, Business Analytics
- Engineering: AWS, Databricks
- Collaboration: Ideation and Project Development, Agile, Code Reviews, Pair Programming, Knowledge Sharing, Technical Presentations, Scrum, Software Testing, Jira, Confluence
- Areas of Expertise: Precision Medicine, Digital Health, BioPharma, Healthcare, Epidemiology, Public Health, Program Management, Research, Biomedical Informatics

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 Obstructive 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

- 08/2024–present **Principal Data Scientist**, *Amgen*, United States.
- 07/2021–08/2024 **Senior Data Scientist**, *Amgen*, United States.
- Leadership & Strategic Planning:
 - Co-lead of AI Taskforce for Obesity & Weight Management.
 - Co-lead of AI Learning Lab for employees across Amgen.
 - Data Science lead for AI Taskforce for Global Patient Safety.
 - Data Science lead for Rare Disease Targeting using AI.
 - SME for Data Science and Precision Medicine strategy at Amgen, participating in workshops and taskforces to define the future of precision medicine at Amgen.
 - Technical Lead:
 - Led the ideation and build process for AI use cases in the obesity pipeline.
 - Author of white paper on AI for Clinical Applications in Healthcare.
 - Tech lead for project to develop competitive intelligence for executives. Built models for news summarization, question/answering, topic modelling, sentiment analysis, and financial forecasting.
 - Helped develop and improve a machine learning pipeline for clinical trial optimization and site selection.
 - Advised business partners on expansion and roll out of production model for Osteoporosis detection.
 - Ingested computer vision pipeline for ingesting cell painting images for cell phenotype changes into Amgen's technical processes.- I led the ideation process to develop use cases for data science in obesity trials and am now building the use cases into proof of concepts.
 - Collaboration & Community Building:
 - Vice Chair of organizing committee for annual Data Science Symposium at Amgen, quarterly AI Demo Days, and quarterly AI Tech Talks.
 - Leader and facilitator of Amgen's mentoring program, streamlined and improved matching process using AI
 - Mentor and manager of junior staff and ambassador for data science across Amgen, facilitating symposiums, journal clubs, knowledge sharing sessions, pilots, and lunch and learns.
- 03/2021–07/2021 **Data Scientist 2**, *Parsyl*, United States.
- Built and deployed model for predicting location of health facility using IOT devices.
 - Built algorithm for predicting shelf life lost for muscle meat products in the cold chain
- 04/2020–03/2021 **Data Scientist**, *HCA Healthcare*, United States.
- Modelled ICU capacity, COVID-19 hospitalizations, & hospital health status.
 - Built end-to-end pipeline for calculating regional COVID-19 R_t values.
 - Built and deployed predictive models for cost of hospital visit for a patient.
- 06/2018–04/2020 **Data Science Co-Op**, *Johnson & Johnson*, United States.
- Created product to model anomalous orders for controlled pharmaceuticals, utilized daily by the controlled substance compliance team
 - Modelled and predicted promotion timing and efficacy for seasonal consumer products
- 09/2014–10/2017 **Monitoring and Evaluation Officer**, *Mennonite Central Committee*, Zambia.
- Applied statistical procedures for evaluating programs and maintaining indicator statistics
 - Managed 17 different projects and corresponding monitoring strategies and evaluations