Namie Nakamura

Boston, MA | (774) 434-7331 | nakamurauculmana.n@northeastern.edu | http://www.linkedin.com/in/NamieNakamura/

EDUCATION

Northeastern University, Boston, MA — Expected May 2027
Master of Science in Bioinformatics — GPA: 4.0
Coursework: Introduction to Bioinformatics, Bioinformatics Programming, Statistics for Bioinformatics, Data Analytics(Collecting, Storing, and Analyzing Data), Bioethics

Wentworth Institute of Technology, Boston, MA — August 2025
Bachelor of Science in Computer Science — GPA: 3.31
Coursework: Computer Science I & II, Data Structures & Algorithms, Linear Algebra, Statistics, Data Science Fundamentals, Databases, Cell & Molecular Biology, Human Genetics & Society, System Administration, Security Principles, Project Management

TECHNICAL SKILLS

Programming Languages: R, Python, Bash Shell, SQL
Bioinformatics Tools: BLAST
Databases: SQLite, UniProt, NCBI, Ensembl
Version Control: Git, GitHub
Tools & Software: RStudio, Visual Studio Code, Jupyter Notebook, Google Colab, Microsoft Office Suite (Excel, Word, PowerPoint), Ubuntu
Operating Systems: Linux, Windows
Languages: English, Spanish

ACADEMIC PROJECTS

Breast Cancer Prediction, Wentworth Institute of Technology — **Feb. 2025 – Apr. 2025**
• Obtained datasets from CDC (USCS), GitHub, and Kaggle
• Built and evaluated SVM, Logistic Regression, and Random Forest models on multi-source breast cancer datasets, achieving up to 98.2% classification accuracy
• Analyzed and interpreted feature importance (e.g., Concavity Worst, Radius Mean) to identify key clinical predictors and demographic risk patterns
• Identified and quantified disease impact trends, finding the highest prevalence among ages 40–59 and disproportionate effects across racial groups

WiDS Datathon 2025 – MIT Team 19, MIT — **Jan. 2025 – Mar. 2025**
• Collaborated on a global Kaggle competition to predict ADHD and biological sex using fMRI neuroimaging data
• Implemented and tested multi-output classification models (XGBoost, Ridge Regression), achieving an F1 score of 0.519 and ranking 462nd globally
• Led preprocessing and feature engineering, including data imputation for socio-demographic and brain scan variables to improve model robustness

AI Studio Fellow Project – Stress Prediction, MIT — **Aug. 2024 – Dec. 2024**
• Developed and optimized time-series models to predict stress using heart rate variability (HRV) and sleep data
• Built and compared LSTM, 1D-CNN, and Logistic Regression models, achieving up to 97.08% accuracy
• Cleaned and extracted physiological features from raw PPG signals using NeuroKit2 and time-series slicing
• Proposed system integration with wearable devices to enable real-time stress monitoring and emotional well-being tracking

Movie Popularity & Rating Analysis, Wentworth Institute of Technology — **Jan. 2023 – Apr. 2023**
• Performed statistical analysis in R on 536 films using linear regression, correlation, and inferential methods
• Quantified relationships between popularity and ratings, identifying a weak positive correlation ($R = 0.087$, $R^2 = 0.007$)
• Developed regression models showing Comedy as the genre with the highest average popularity, with popularity increasing by ~3.93 votes per rating point
• Presented and visualized findings using summary statistics, histograms, boxplots, and genre-based comparisons

WORK EXPERIENCE

Payroll Management Per-Diem, Tempus Unlimited, Inc., Stoughton, MA — **July 2022 – Present**
• Reviewed, verified, and documented PTO records and new-hire payroll paperwork, including Social Security and financial information, to ensure data accuracy
• Generated, processed, and distributed EVS letters and coordinated team meetings to communicate payroll updates and process improvements
• Maintained and monitored compliance with payroll regulations, data privacy standards, and internal accuracy requirements

Fellowship Student, Break Through Tech at MIT, Cambridge, MA **April 2024 – April 2025**
• Selected from 3000+ applicants for the Break Through Tech AI Program at Cornell Tech.
• Participate in a 12-month-long program, including Machine Learning coursework with Cornell faculty, experiential learning experiences, and mentorship from industry professionals.

AI Studio Fellow, Embolden Associates LLC, Remote **Aug. 2024 – Dec. 2024**
• Developed and evaluated predictive models for stress detection using heart rate variability (HRV) and sleep time-series data
• Built, tested, and optimized deep learning models (LSTM, 1D-CNN) alongside Logistic Regression, achieving up to 97.08% accuracy
• Collected, cleaned, and analyzed raw PPG data; extracted and classified HR/HRV features using NeuroKit2 and time-series slicing
• Proposed and designed system integration with wearable devices for real-time stress monitoring and emotional well-being tracking

IT Technical Support Engineer Intern, Harvard University, Cambridge, MA **Jan. 2024 – April 2024**
• Configured, installed, and deployed MacBook and Dell systems; re-imaged laptops and integrated devices into the University domain
• Diagnosed and resolved end-user hardware and software issues while documenting and tracking incidents in ServiceNow (SNOW)
• Verified and authenticated user affiliation through MIDAS and ensured secure access to university systems
• Maintained and inspected lab infrastructure, including printers, workstations, and Ethernet connectivity
• Assisted and trained end users on HarvardSecure Wi-Fi and Crimson Print configuration and usage.

IT Support Intern, Moderna, Cambridge, MA **June 2023 – Sep. 2023**
• Configured, deployed, and supported laptops and mobile devices for new-hire onboarding
• Managed and executed system imaging, administrator removal, and device setup using SCCM and Command Prompt
• Ensured and monitored compliance with IT security protocols while improving operational efficiency in device management

RESEARCH EXPERIENCE
Heart Disease Risk Prediction, Wentworth Institute of Technology, Boston, MA May 2025 – Dec. 2025
• Obtained and compiled large-scale cardiovascular datasets from UC Irvine Machine Learning Repository and Data.gov
• Collected, classified, and cleaned raw clinical data to preserve medically relevant features (e.g., age, cholesterol, blood pressure, diabetes, smoking status)
• Developed and evaluated machine learning models (Logistic Regression, Decision Tree, Random Forest) to predict heart disease severity (levels 0–4)
• Analyzed and interpreted confusion matrices and class-level performance metrics
• Identified and ranked influential clinical risk factors using feature importance analysis

Awards & Honors
Wentworth Presidential Scholarship
• Merit-based academic scholarship awarded for outstanding academic performance

The Global Seal of Biliteracy
• Recognized for professional-level proficiency in both English and Spanish.

Break Through Tech AI Program – MIT
• Completed a selective year-long AI fellowship with MIT & Cornell Tech, focused on real-world ML applications using Python and scikit-learn.

Women@Wentworth Undergraduate Leadership Program
• Recognized for excellence in leadership and commitment to empowering women in STEM through Wentworth's leadership program.

Cornell University – Machine Learning Foundations Certificate
• Completed training in supervised learning, ML pipelines, and foundational modeling concepts.

Activities
• San Simon New England Aug. 2024 - Present
• Society of Hispanic Professional Engineers (SHPE) Sep. 2021 - Aug. 2025
• Asian Society Association (ASA) Sep. 2021 - Aug. 2025
• Wentworth Women's Council (WWC) Sep. 2021 - Aug. 2025