Ellen Martin

(475) 414-9126 | martin.ellenjane@gmail.com | LinkedIn: linkedin.com/in/martinellenjane | GitHub: github.com/ellenmartin11|Portfolio: ellenmartin11.github.io/portfolio

PROFESSIONAL SUMMARY

Master's student in Data Science with 5 years of research and practical experience in psychology and neuroscience, skilled in R, Python and MATLAB. Strong track record of publishing original scientific research and collecting experimental data. Actively seeking opportunities to leverage data science to solve complex challenges in psychiatry and health, and eager to learn about integrating AI into mental health research and care.

CORE COMPETENCIES:

Data Science & Machine Learning:	▪ Exploratory Data Analysis ▪ Statistical Analysis ▪ Predictive Modeling ▪ Big Data Analytics ▪ Natural Language Processing
Programming & Tools:	▪ R ▪ Python ▪ MATLAB ▪ AWS ▪ Git
Research & Analysis:	▪ Gorilla Experiment Builder ▪ REDCap ▪ Data Science Pipelines
Clinical Research:	▪ Research Study Design and Implementation ▪ fMRI Data Acquisition ▪ Cross-functional Collaboration

EDUCATION

Tagliatela College of Engineering, University of New Haven ▪ West Haven, CT (expected 2026)
Master of Science in Data Science

- **Coursework:**
  ▪ Machine Learning ▪ Big Data ▪ Data Visualization ▪ Deep Learning ▪ Natural Language Processing (NLP) ▪ Leadership in Data & AI Products ▪ Data Ethics ▪ etc.
- **Tools:**
  ▪ Python ▪ R ▪ SQL ▪ TensorFlow ▪ Hadoop ▪ Tableau ▪ AWS Athena
- **Achievements:**
  ▪ Dean's Scholarship

Anna Freud Centre, University College London ▪ London, United Kingdom
Master of Research in Developmental Neuroscience and Psychopathology ▪ Honors Graduate

- **Coursework:**
  Data Visualization ▪ Dimension Reduction ▪ Path Modeling ▪ Statistics ▪ Research Publication ▪ Neuroimaging ▪ Meta-Analysis
- **Tools:**
  ▪ Python ▪ R

University College London ▪ London, United Kingdom
Bachelor of Science in Psychology ▪ Dean's List Graduate

- **Coursework:**
  ▪ Big Data ▪ Structural Equation Modeling ▪ Statistics ▪ Research Publication
- **Tools:**
  ▪ R ▪ FUMA ▪ SPSS
- **Achievements:**
  ▪ Winner of the Undergraduate Project Prize

PROFESSIONAL EXPERIENCE

Integrated Refugee and Immigrant Services ▪ New Haven, CT June 2025 - Present
Volunteer Data Analyst and Employment Assistant

- Consolidated and cleaned 5 years of data from different sources for a final grant report.
- Analyzed data using R and Excel to report to department supervisors and program donors.
- Generated user-friendly spreadsheets and reports for organization-wide use.

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Yale University ▪ New Haven, CT June 2023 - December 2024

Postgraduate Research Technician, Rutledge Lab

- Assisted with collection of neuroimaging, smartphone app and survey data for a longitudinal R01 study on happiness, decision-making and depression.
- Contributed to the development of a 12-month follow-up study arm, involving designing surveys and tasks to be delivered on a smartphone app.
- Developed and maintained large participant databases to track participation, adherence and participant reimbursements.
- Implemented and developed economic decision-making models and models of happiness using participant data.
- Collaborated with cross-functional teams to generate and analyze large datasets, delivering actionable insights and data-driven solutions.
- Utilized programming languages and tools such as Python, R and Matlab to model human behavior and mood, to generate data visualizations for reports and presentations, and to execute techniques in natural language processing.
- Developed strategies to boost recruitment, participation and adherence, and to improve the quality of participants' data.
- Presented findings at the Computational Psychiatry Conference 2024 in Minnesota.

Yale University Child Study Center ▪ New Haven, CT August 2022 - June 2023

Research Assistant, Stover Lab

- Assisted with interviewing of participants in the Fathers for Change intervention for family violence.
- Contributed to lab manuscripts by conducting literature reviews.
- Designed a Python and AWS pipeline for obtaining and analyzing biobehavioral data collected using wearable technology for a new clinical trial studying trauma.
- Utilized programming languages and tools such as Python, R and SPSS to analyze outcomes associated with the Fathers for Change intervention and examine participant adherence.
- Analyzed a dataset containing 30 years' worth of data to examine outcomes associated with prenatal cocaine exposure.
- Presented research findings at the Western Psychological Association 2023 Conference in Riverside, CA.

PROJECTS AND PORTFOLIO

Anxiety, Mood and Decision-Making ▪ New Haven, CT February 2024 – December 2024

Postgraduate Research Technician, Yale University Rutledge Lab

- Research project for a poster submission at the Computational Psychiatry Conference (Minnesota).
- Cleaned and analyzed over 5,000 individuals' worth of data to examine the impact of depression and anxiety on behavior in a smartphone decision-making game.
- Using MATLAB and R, adapted existing economic models of decision-making and happiness to fit a risky and uncertain decision-making game.

Language Conceptualizations of Depression ▪ New Haven, CT August 2023 – December 2023

Postgraduate Research Technician, Yale University Rutledge Lab

- Exploratory research project comparing numeric scale ratings of depression to language conceptualizations of depression.
- Analyzed language responses to prompts based on the Patient Health Questionnaire by generating word embeddings from OpenAI.
- Implemented NLP techniques such as computing Euclidean and Cosine distance between embeddings, and implementing dimensionality reduction techniques.
- Findings highlighted the added value of collecting participants' responses to open-ended text prompts, beyond solely administering self-report numerical scales to understand depression.

Genetic Underpinnings of Loneliness and Mental Health ▪ London, UK August 2020 – July 2023

BSc Psychology Undergraduate, University College London Causal Mapping Lab

- Original research project submitted as final coursework for BSc Psychology at UCL.
- Analyzed genomic data from over one million individuals using Genomic Structural Equation Modelling to examine latent associations connecting loneliness, mental health disorders and substance use.
- Conducted a Genome-Wide Association Study (GWAS) to examine genetic loci associated with loneliness.

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- Implemented Mendelian Randomization to conduct causal analyses.

Professional Portfolio ▪ New Haven, CT, United States

▪ Access my professional portfolio: https://ellenmartin11.github.io/portfolio/

PUBLICATIONS

- **Martin, E.,** Ramos, K. N. L., Modanesi, E., Mayes, L.C., & Stover, C. S. (2025). *Substance Use, Executive Function and Young Adult Intimate Partner Violence: Direct and Indirect Pathways.* Journal of Interpersonal Violence.
- **Martin, E.,** Schoeler, T., Pingault, J-B & Barkhuizen, W. (2023). *Understanding the relationship between loneliness, substance use traits and psychiatric disorders: A genetically informed approach.* Psychiatry Res.
- **Martin, E.,** Hur, J. K, Bedder, R. L., Heffner, J., Kao, C-H., Feng, G. W., & Rutledge, R. (2024). *Anxiety alters mood sensitivity to outcomes during risky decision-making.* Computational Psychiatry Conference.
- Stover, C. S., Holland, M. L., **Martin, E.,** Modanesi, E., Fish, M. C., & Beebe, R. *Comparing in person to telehealth delivery of a family violence intervention.* (2024). Clinical Psychology & Psychotherapy.
- Schoeler, T., Baldwin, J., **Martin, E.,** Barkhuizen, W., & Pingault, J-B. *Assessing rates and predictors of cannabis-associated psychotic symptoms across observational, experimental and medical research.* (2024). Nature Mental Health.

LANGUAGES

English	*Native-Speaker*	
Spanish	*C1 – University College London*	January 2012 – May 2019