

Huayi (Phyl) Peng

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Education

Georgia Institute of Technology, Atlanta, GA

Master's program in **Computer Science**

Expected to graduate in May 2025

University of Virginia (UVA), Charlottesville, VA

August 2019 – May 2023

Bachelor of Arts in **Computer Science** and **Neuroscience** with **Distinction**

- Cumulative GPA: 3.7/4.0

Technical Skills & Languages

Programming Languages: PYTHON | MATLAB | R | SQL | C++ | JAVA | JavaScript | HTML | CSS | PHP | LATEX

Non-language skills: git | GitHub | MySQL | SQLite | Hadoop | Salesforce | Django

Chinese – Native Proficiency | English – Full Professional Proficiency

Coursework Projects

- developed two full stack web app using PHP, MySQL, CSS and HTML and the Django framework respectively using agile methodology
- designed, analyzed, and implemented relational databases for high performance for web applications
- programmed, analyzed, determined the complexity of different sorting & pathfinding graph algorithms
- mathematically modeled neuronal system behaviors and statistically analyzed network performance
- programmed and tune logistics, knn, svm deep neural network models; data processing & feat engineering
- mathematically modeled and analyze signal data for processing with Fourier transform and convolution via Python3
- collected and visualized 4G signal data to reveal UVA campus underground signal coverage insights in python 3
- conducted online customer purchase intention analysis in python using data viz., feat. engineering and the decision tree model

Research Experience

Research Assistant at UVA Levy Lab - Computational Neuroscience Lab

January 2020 – Jun 2023

- Developed, tested, troubleshoot, maintain, and document 3 mathematical Hippocampal CA3 behavioral models and improved the Recurrent Neural Network
- Performed research on neural network learning through designing and performing rigorous experiments and statistical analysis
- Conducted data analysis, data visualization, and discussion and reported results in the form of research reports, a thesis, and talks.

Research Assistant at UVA Kundu Lab - Medical Imaging Lab

August 2021 - May 2022

- Trained LSTM machine learning model to derive critical biostatistics from medical imaging data
- Collaborated with one graduate and undergrad student to publish one abstract in the Journal of Nuclear Medicine
- Built a MATLAB pipeline to process PET, CT, and MRI images for blood input calculation

Work Experience

SalesForce Data Specialist at UVA Pediatrics Department

August 2022 - December 2022

- Designed and implemented SalesForce flows to perform automated processes for employment cycle tasks
- Upgraded the Department of Pediatrics' Website using SalesForce CMS and Experience
- Programmed data life-cycle automation using SalesForce dataloader.io and excel

Data Science Tutor at UVA Data Science Program for Neurodiverse Young Adults

August 2022 - May 2023

- Tutored and mentored two neurodiverse young adults python-based data analysis & visualization, data interpretation, database systems, ML, version control and python programming at UVA's School of Data Science
- Held weekly sessions assessing and targeting the mentee's strengths and weaknesses in programming and data science and provided feedback
- Customized python and statistics content that cater to the mentees' interests and needs
- Reported weekly in writing and in-person meetings to the program director and collaborated with 3 other mentors

Achievements and Publications

- Published as **second author** in [abstract](#) "Machine learning derived model corrected blood input function from dynamic FDG PET images of rat heart" in the Journal of Nuclear Medicine
- UVA Harrison **Research Award - \$4000** research fellowship for Hippocampal learning theory project in Neuroscience
- Presented at Undergraduate **Research Symposium** and neuroscience research **Poster Session** in Jan 2023
- Received **Distinction award** for research involving computational neural network analysis

Hobbies

an avid indoor rock climber who likes to sketch