

TANYA NAIR

tnair4@jh.edu ◇ (425) 837-2423 ◇ GitHub ◇ LinkedIn ◇ Google Scholar

RELEVANT EXPERIENCE

Levy Lab - Dartmouth Hitchcock Health Center

Hanover, NH

Emerging Diagnostic and Investigative Technologies AI Intern

06/2024 - 09/2024

- Developed a Retrieval-Augmented Generation (RAG) system to cross-reference 10,000+ real-world pathology reports for clinician insight retrieval from unstructured clinical data
- Integrated Okapi BM25 ranking with FAISS vector indexing for optimized lexical and semantic search across the large corpus
- Presented final model at end-of-summer conference to 50+ health and ML professionals

Spark Summer Mentorship Program - University of Washington

Seattle, WA

UW Advancing Accessibility for Engineering Education Intern

06/2024 - Present

- Worked for Prof. M. P. Anantram and Dr. Lalitha Subramanian to research methods of advancing accessibility for engineering education at UW
- Developing an automated process to mass-enhance the accessibility of preexisting PowerPoint presentations

Kids Coming Together

Sammamish, WA

President, Board Representative

2019-2025

- 500+ hours serving just this organization – awarded the Gold Presidential Service Award
- Led team of 20+ students to organize community service events that impacted 1000+ kids yearly
- Facilitated outreach and expansion efforts into 2 nearby cities

Independent Natural Language Processing Research

Remote

NLP used in sentiment analysis of poetry: a study of six techniques

06/2022 - 09/2022

- Analyzed accuracies of six common NLP techniques when applied to sentiment analysis of poetry
- Implemented six different NLP techniques in R - unigrams, bigrams, topic modeling, word embeddings, dictionaries, distributed dictionaries
- Published paper in Journal of Student Research in 05/2023

YouTube Channel

Remote

MLinguist

09/2023 - Present

- YouTube channel and Instagram explaining computational linguistics concepts and current trends
- 3K+ views and growing; producing accessible educational content to present NLP topics for general audiences

EDUCATION

The Johns Hopkins University

Baltimore, MD

Computer Engineering, Whiting School of Engineering

08/2025-Present

- Relevant Coursework: Intermediate Programming (C/C++, Linux), Honors Linear Algebra

Central Washington University

Sammamish, WA

Dual-Enrollment Student

09/2024-06/2025

- GPA: 4.0/4.0
- Relevant Coursework: Multivariable Calculus I/II, Linear Algebra

Eastlake High School

Sammamish, WA

High School Diploma

09/2021 - 06/2025

- GPA: 4.0/4.0
- Relevant Coursework: AP Computer Science A (5), Data Structures and Algorithms

TECHNICAL SKILLS

- **Programming:** C, C++, Java, Python, HTML/CSS/JavaScript
- **Frameworks & Libraries:** PyTorch, TensorFlow, scikit-learn, NumPy, Pandas, SciPy
- **Machine Learning:** Deep Learning, NLP, Computer Vision, RAG, Vector Search, Sentiment Analysis
- **Tools & Platforms:** Git, Docker, Jupyter, VS Code, n8n, LaTeX, Emacs, Linux