# DANIEL WANG

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 $https://danielwang 23.github.io/Personal-Portfolio-Website/ \\ \diamond linked in.com/in/daniel-wang 23/ \\ \diamond github.com/danielwang 23/ \\ \phi github.com/danielwang 2$ 

#### EDUCATION

# The University of North Carolina at Chapel Hill

B.S. Computer Science., B.S. Data Science, GPA: 3.90/4.00

Relevant Coursework: Data Structures, System Fundamentals, Foundations of Programming, Discrete Mathematics, Multivariable Calculus, Linear Algebra, Intro to Data Science, Communication for Data Scientists Honors & Awards: Honors Carolina Scholar (Awarded to 10% of students), Dean's List, Top 15 Club Tennis Player

## TECHNICAL SKILLS

Programming Languages:	Python, Java, HTML, CSS, Javascript, R, SQL, Swift, C
Frameworks and Libraries:	Pandas, Biopython, scikit-learn, PyTorch, NumPy, SwiftUI
Developer Tools:	AWS Cloud, Git, GitHub, VS Code, Xcode

#### EXPERIENCE

### iOS Bootcamp Programmer

App Team Carolina

- Learning and applying mobile development best practices including UI/UX design, debugging, and code optimization.
- Collaborating with team members on projects focused on technical app development with Swift and SwiftUI.
- Actively testing skills in iOS app architecture, design, and creation of functional solutions for real clients.

### Undergraduate Research Assistant

UNC at Chapel Hill Department of Biostatistics

- Examined genetic sequencing data and performed statistical regression tests to identify significant genetic patterns and trends in infected cells under Dr. Fei Zou.
- Created data visualizations based on migration and enrichment scores from genetic data calculated in R.
- Employed R packages such as Seurat and xCell Analysis for advanced single-cell data analysis and visualization.

### PROJECTS

### AspireWave Motivational App | Swift, SwiftUI

- Developed an iOS app with Swift that provides a scrollable, interactive view of motivational quotes for users.
- Integrated the ZenQuotes API to fetch and display dynamic quotes, and used SwiftUI to build a responsive and visually appealing user interface with smooth animations and transitions between Swift view pages.

### Tic-Tac-Toe | Python

- Replicated a Python-based Tic-Tac-Toe game, enhancing the classic gameplay with custom themes and features.
- Implemented dual game modes: Player vs. Player or Player vs. Computer, using a randomization algorithm to drive computer opponent decisions.

# $\label{eq:redicting High-Risk Wildfire Zones \mid Carolina \ Data \ Challenge \ Data thon$

- Created a successful machine learning risk-assessment model utilizing Python and a gradient-boosting regressor in scikitlearn to identify the primary factors influencing wildfire progression.
- Leveraged Tableau to create multiple impactful and visually compelling data visualizations such as treemaps, geographic bubblemaps, and t-test diagrams .
- Collaborated with a team of 4 students in data cleaning efforts for a dataset with 10,000+ values.

### Tennis Program Website | HTML, CSS, Javascript, MySQL

- Designed a user-friendly website that streamlined information management for my high school's tennis program.
- Integrated dynamic and interactive features using JavaScript to provide real-time updates on match schedules, player stats, and team news, improving overall website engagement.
- Implemented a structured MySQL database to efficiently store and retrieve match results and team data.

### Computational Identification of Lactic Acid Bacteria | Carnegie Mellon University Aug. 2022 - June 2022

- Developed a computational algorithm using Python, Biopython, and the Ribosomal Database to build a comparison pipeline for differentiating between various lactic acid bacterial (LAB) strains within the 16S rRNA subregion.
- Streamlined a process to improve identification of LAB bacteria, enabling more efficient research into bacterial classification.

Aug. 2023 - Present

Aug. 2024 - Present Chapel Hill, NC

June 2024 - Aug. 2024 Chapel Hill, NC

Aug. 2024 - Sept. 2024

June 2024 - Aug. 2024

October 2023

Jan. 2023 - May 2023