**Khanh (Kaitlyn) Nguyen**

khanh.nguyen@uga.edu • 678-237-3383 • github.com/khanhcodes • linkedin.com/in/nhukhanhng

**EDUCATION**

**University of Georgia** Athens, GA

***Bachelor of Science in Franklin College of Arts and Sciences*** May 2025

* **Majors:** Computer Science and Mathematics GPA: 3.96/4.00
* **Honors:** Presidential Leadership Scholarship with Full Waiver
* **Relevant Coursework:** Intro to Computing and Programming (CSCI 1301), Software Development (CSCI 1302), Discrete Mathematics (CSCI 2610), Intro to Theory of Computing (CSCI 2670), Linear Algebra (MATH 3300)

**The Orme School of Arizona** Mayer, AZ

***High School Diploma*** May 2021

Valedictorian - GPA: 4.0/4.0 (unweighted), 4.77/4.77 (weighted)

**SOFTWARE SKILLS**

**Programming Languages:** Python, Java, JavaScript

**Web Development:** React, HTML, CSS, Bootstrap, jQuery, Flask, Node.js, Heroku

**Tools:** Pandas, NumPy, OpenCV, Scikit-learn, TensorFlow, Keras, PyTorch, Git, Colab, Figma, Adobe XD

**Machine Learning:** Data analysis, logistic regression, linear regression, KNN, SVM, XGBoost, random forest, model optimization, dimensionality reduction, basic neural networks

**WORK & OTHER EXPERIENCES**

**Machine Learning Intern,** *Wisdom Robotics, Vietnam* May 2022 – Present

* Conduct research on the applications of graph neural networks and meta learning

**Summer Research Fellow,** *Schmitz Lab, University of Georgia* April 2022 – Present

* Awarded Research Fellowship Grant to implement dimensionality reductions and autoencoder neural networks to optimize cell-type classification model and achieve higher acccuracy

**Machine Learning Research Intern,** *Department of Genetics, University of Georgia* Mar 2022 – Present

* Conduct research on new computational methods to predict cell type in crop plants and analyze the influence of genetic variation on gene expression to improve crop plant trait performance
* Build a pipeline for data collection, data processing, data cleaning, and data analysis of single-cell genomic seedling and crown root dataset from scratch using Python, Scikit-learn, and other open-source libraries
* Trained and performed 5-fold cross validation on different machine learning models including Neural Networks, KNN, SVM, Logistic Regression, Random Forest, etc. and evaluated their classification performance on testing data

**Computer Science & Mathematics Tutor,** *Arlington, TX* Nov 2020 – May 2021

* Worked with individual students to provide tutoring in AP Calculus, AP Computer Science, and SAT Math

**UX-UI Designer at JunctionX Asia,** *Ho Chi Minh City, Vietnam* Aug 2020

* Developed User Interface for a virtual queue management app for businesses during covid

**Frontend Developer Intern,** *Au My Uc Educational Consultancy Co., Vietnam* Dec 2019 – Sep 2020

* Worked on and implemented landing pages from concept to deployment using React, HTML, and CSS
* Enhanced user experience by creating site structures, navigation, page optimization, and graphics integration

**PERSONAL PROJECTS**

**DawgExplore – UGAHacks 7** Feb2022 **-** React, TypeScript, HTML, JSS, Python, Flask, SQL, Git

* DawgExplore is an event discovery web application that allows UGA students to discover real events on campus. The user interface was developed with React, Node.js, TypeScript, HTML5, and JSS. For the back-end, a Flask API was created to connect to the front-end with an SQLAlchemy Database consisting of all of our event data scraped from <https://calendar.uga.edu/>. The web app was constructed in two days and was later deployed on Heroku.

**Drug Discovery Using Machine Learning (Bioinformatics)** June 2021 - Python, Pandas, NumPy, Scikit-learn, Streamlit, Git

* A web app built in Python that allows users to predict the most effective molecules in inhibiting Acetylcholinesterase enzyme based on pIC50 values. The result can be used to discover potential Alzheimer’s drugs. The data used was collected from the chEMBL database and Random Forest was implemented to build a regression model for predicting the bioactivity of the compounds.

**Speech To Text Web Application**  June 2021 **-** Python, Flask, Jinja, HTML, CSS

* A full stack web application constructed with Flask and deployed on Heroku that allows users to transcribe audio files into text. Google's Speech Recognition API was implemented in the backend.