

# Scott Watanuki

U.S. Citizen | scottwatanuki@gatech.edu | linkedin.com/in/scottwatanuki/ | github.com/scottwatanuki | 808-940-1047

## EDUCATION

### Georgia Institute of Technology

Expected Graduation: May 2025

*Bachelor of Science in Computer Science*

- **Specializations:** Artificial Intelligence, Information Internetworks
- **Relevant Coursework:** Software Engineering and Software Design, Data Structures and Algorithms, Object Oriented Programming, Computer Organization and Programming, Introduction to Computing, Probability and Statistics, Multivariable Calculus, Discrete Mathematics, Linear Algebra

## WORK EXPERIENCE

### Software Engineer Intern

November 2022 – August 2023

*GL Navigation*

- Implemented machine learning based emotion recognition model into production with Python, DeepFace, OpenCV
- Incorporated parallel/batch processing, and TensorFlow to enhance emotion recognition model's runtime
- Automated video retrieving process to increase developer productivity by utilizing Python and Box SDK
- Created Python-based web scraper to extract textual data using Selenium Webdriver and BeautifulSoup
- Reduced code base by 50% by implementing object-oriented programming techniques to modularize code

### Software Engineer Intern

June 2022 – August 2022

*GL Navigation*

- Redesigned and improved speaker data collection process by 50% using Python and OpenCV
- Increased student engagement by 20% by quantifying speaker frequency and speed using Python and OpenCV
- Visualized results to CSV file for increased user experience in interpreting data and further analysis
- Streamlined data preprocessing using AWS Transcribe to output JSON file containing speaker segmentation data

### Machine Learning Engineer and Researcher

April 2021 – October 2021

*John and Violet Kay Summer Research Fellowship*

- Achieved 93.41% accuracy in diagnosing cataracts by developing a convolution neural network using Python
- Developed model and visualized results using transfer learning model with TensorFlow, Keras, Numpy, Matplotlib
- Decreased false diagnosis through testing five optimization algorithms and six learning rates
- Prevented overfitting of the model and reduced loss rate by incorporating data augmentation and dropout layers

## PROJECTS

### 2D Dungeon Crawler Game | Java, Android Studio, Gradle, Git, GitHub

- Designing and developing 2D Dungeon Crawler game where players navigate rooms and combat enemies
- Creating domain models, use case diagrams, and singleton design patterns along with extensive testing of code

## LEADERSHIP AND AWARDS

### Vice President of Technology | Big Data Big Impact @ Georgia Tech

July 2022 – Present

- Mentoring 10 tech and project leads, guiding for successful execution of software projects leveraging AI & big data
- Orchestrating web development team for development and maintenance of the organization's website

### Founder | Nalukai Academy Startup Accelerator

June 2022 – July 2022

- Selected and participated in intensive accelerator program with mentorship from high-profile venture capitalists
- Led four-person team to develop a business plan and model for selling movable desks, culminating in a pitch

### Founder, Award of Honor, 1st Place Pitch | Stanford e-Entrepreneurship

July 2021 – October 2021

- Directed team to first place in pitch competition evaluated by venture capitalists from top firms in Silicon Valley
- Obtained the highest final grade of 98%, resulting in an award of honor given to the highest performing participant

## SKILLS

**Programming Languages:** Python, Java, JavaScript, HTML/CSS, C/C++

**Developer Tools:** Git, GitHub, Linux, Tensorflow, Keras, OpenCV, Pandas, Matplotlib, NumPy, AWS, JSON, Android Studio, Gradle, Selenium Webdriver, BeautifulSoup, JavaFX

**Concepts:** Backend, Infrastructure, Frontend, Fullstack, API, Machine Learning, Computer Vision, Object Oriented Analysis/Design, CI/CD, Debugging, Testing, Agile, Waterfall, Data Visualization