https://www.linkedin.com/in/krithik-tamilvanan/

# krithik.tamilvanan@gmail.com https://github.com/tkrithik (925) 448 6475

## **EDUCATION**

**Dublin High School** Dublin, California GPA: 4.67, Honor Roll Student 2020 - 2024

## College Curriculum AP Courses

- **AP Computer Science Principles**
- **AP Computer Science Applications**
- AP Calculus AB & BC
- AP Environmental Science

- AP European History
- **AP US History**
- AP Seminar
- **Honors Chemistry**

#### **TECHNOLOGIES**

Python

- Java
- **JavaScript**
- Linux & Mac OS

- HTML
- CSS
- **Google Suites**
- Microsoft Windows

## **ACADEMIC PROJECTS**

Chatter Chatbot, Dec 2022

- Built Chatbot using transformers for JAX, PyTorch, TensorFlow and Google Text to Speech service.
- Trained using model data from Facebook.

**Nitrate Purifier** May 2022

- Designed and developed Nitrate Purifier using Fusion360
- Allows for cost-efficient and repeated nitrate testing by controlling the flow of reactants necessary to test.

May 2021 Pandemic Protection

Utilized Arduino microcontrollers and ultrasonic sensors to protect users from COVID-19 by maintaining social distancing standards.

## **HACKATHONS**

**Harvest Hacks** Nov 2022

- Built fruit detection module using Google Vision API to detect fruits
- Integrated with Wikipedia library to scrape fruit data
- Enables farmers to quickly access fruit information.

Feb 2021 **Transcribe Service** 

- Built video to transcript conversion module using AWS Transcribe API
- Aids those with hearing loss to convert and read media content.

**NBA Speech Stats** Oct 2022

- Built voice service to access NBA statistics using Google Text to Speech Package and Speech Recognition libraries
- Benefits those with vision imparities to access NBA statistics verbally.

# **EXPERIENCE**

June 2020 - May 2022 California Tamil Academy Teaching Assistant (Volunteer) Pleasanton, California

- On a weekly basis, tutored Tamil to younger students and developed teaching techniques including games and worksheets
- Provided feedback to students, using positive reinforcement techniques to encourage, motivate, and build confidence in students.

## **STEM**

March 2017 - Present **Destination Imagination** 

- Developed teamwork skills and communication techniques as well as acting and speaking skills through practice and live presentations
- Cultivated leadership techniques, while strengthening existing skills in Computer Science through activities including programming self-navigating drones, building sunlight blooming flowers, and mechanical props and backdrops.
- Performed well at a statewide and global level, placing among top teams consistently for over 5 years

## **AWARDS**

- Destination Imagination: Da Vinci awards for precedential and innovative solutions
- Destination Imagination: Renaissance awards for outstanding creativity and skill, specifically in engineering
- Recognition from numerous school districts, including Dublin and Livermore for HYC programs