SAHITHI ANKIREDDY

sankired@caltech.edu
sahithiankireddy14.github.io
https://www.linkedin.com/in/sahithiankireddy/

EDUCATION

California Institute of Technology
B.S. Computer Science
GPA: 4.00
Pasadena, CA | Expected June 2025

JB Conant HS
UW GPA: 3.978/4.000
Richard C. Kolze Award Recipient
Hoffman Estates, IL | May 2021

SKILLS

Programming
Python • Java • C++ • C • SQL • JavaScript • HTML • CSS • LaTeX • Bash

Tools
TensorFlow • Keras • NumPy • Matplotlib • Sci-Kit Learn • Docker • Protocol Buffers • Jupyter • Unity • Android Studio • Google Cloud

Other
Machine Learning • Computer Vision • Data Science

HONORS AND AWARDS

Computing:
- ACM/CSTA Cutler-Bell Prize, 2021
- USA Computing Olympiad Silver Division, 2020
- NCWIT AiC 2021 National and 2020 Regional Awardee
- Intel Excellence in Computer Science, 2019
- Business Professionals of America (BPA) Nationals Top 18 in Computer Security, 2019

CS Research Competitions:
- Best Paper Award at IEEE MIT URTC, 2019
- Intel ISEF Finalist, 2019
- 3 x Best in Category at Illinois Junior Academy of Science, 2018 | 2019 | 2020
- 2 x Junior Science and Humanities Symposia Chicago Region Finalist, 2019 | 2020

Business & Community:
- 1st place at BPA Nationals in Global Marketing in 2019 & 3rd place in 2021
- 3 x BPA National Qualifier, 2019 | 2020 | 2021
- 2 x Presidents Volunteer Service Gold Award, 2019 | 2020

OBJECTIVE

Sahithi Ankireddy is a dedicated second-year undergraduate student with computer science experience in machine learning, computer vision, cloud computing, and full stack development. Sahithi has won various computing awards for her projects and is looking for machine learning and software engineering summer 2023 internships.

EXPERIENCE

Google | STEP Intern *June 2022 – Sep 2022*
- Developed a full stack internal dashboard tool for custom search and analysis of remote procedure calls routed through a distributed proxy service
- Specifically, created an interface with a C++ backend and a JS, HTML, CSS frontend that enables user-friendly querying via SQL and generates insightful analysis and visualizations through the Google Charts API
- Attended various technical and leadership workshops at the Google Women Intern Community (gWIC) summit

University of Chicago | Research Assistant *June - August 2021*
- On the Chameleon Cloud (NSF-funded cloud computing testbed) team, working with the CHI@Edge testbed, which provides support for edge computing research.
- Trained various machine learning self-driving car algorithms using cloud infrastructure for real-time testing and developed a cloud-based pipeline for driving autonomous cars with CHI@Edge and Docker
- More Project Information: https://datascience.uchicago.edu/engage/summerlab-projects/

Ceural | Research Intern *June – August 2020*
- Co-authored a research review paper on brain machine interfaces for neurorehabilitation that was accepted to Young Scientists Journal

PROJECTS

Assistive Diagnostic Tool for Brain Tumor Detection and Segmentation using Computer Vision *September 2019 – August 2020*
- Applied computer vision techniques and specifically a Mask R CNN segmentation model through transfer learning to detect and segment brain tumors
- Used Google Cloud Services for a 6 vCPUs and 60 GB memory Linux Server running Ubuntu to train the neural network
- IEEE Xplore: https://ieeexplore.ieee.org/document/9668906

A Novel Approach to the Diagnosis of Heart Disease Using Machine Learning and Deep Neural Networks *December 2018 – May 2020*
- Developed an application for assistive heart disease diagnosis
- Utilized Google TensorFlow and scikit-learn to develop neural networks and machine learning models
- Applied various optimization and hyper parametrization techniques like the Grid Search algorithm to increase the accuracy prediction rate of heart disease
- IEEE Xplore: https://ieeexplore.ieee.org/document/9660581

COURSEWORK

Relevant Caltech Coursework: Learning Systems • Intro to Computing Systems • Intro to Software Design • Decidability and Tractability • Intro to Programming Methods • Intro to CS Programming • Introduction to CS Research • Differential Equations • Intro to Discrete Mathematics • Calculus of One and Several Variables and Linear Algebra

Coursera Courses: Introduction to TensorFlow for AI, Machine Learning, and Deep Learning • Convolutional Neural Networks in TensorFlow • Natural Language Processing in TensorFlow • Sequences, Time Series and Predictions