

VARUN KULKARNI

<https://varunkdev.com/>

EDUCATION

The Ohio State University, Columbus OH

2021-2025

B.S, Computer Science

GPA: 3.6

EXPERIENCE

The Ohio State University James Cancer Center & Solove Research Institute

May 2023 - Aug 2023

Internship - Research Fellow

Columbus, OH

- Developed and implemented machine learning algorithms for annotating histopathological image datasets of Glioblastoma Tumors
- Assisted in creating user interfaces to facilitate deep learning segmentation analysis of cancerous epithelial tissue, enhancing accessibility and data-driven insights

Chromium Coffee Co.

Oct 2021 - Present

President

- Set policies and strategic direction for the company, both for the near term and for the foreseeable future
- Created, communicated and implemented the organization's vision, mission and overall direction

PROJECTS

ML-Based Glioblastoma Annotation Mask

May 2023 - Aug 2023

- Utilized META's SegmentAnything model to develop a local runtime-based annotation program capable of segmenting tumorous regions from Glioma WSI's with high accuracy
- Developed a Python-based image registration algorithm for skewing images to improve cross-validation comparison
- Developed a program to determine segmentation accuracy using the Sørensen Index

Ohio State Wordle!

2022

- Developed a web-based rendition of the popular 'Wordle' game catered towards Ohio State students
- Utilized JQuery, Mark-Sweep Algorithm, and a custom UI

SKILLS

Languages

Java, HTML/CSS/JavaScript, Python, R

Data Tools

MySQL, Tableau, Data Wrapper, Jupyter

Motion Graphics Tools

Illustrator, Blender, After Effects, Solidworks, Lightroom

Music Tools

FL Studio, Audition

Other Skills

Typing (120 WPM), Organization, Collaboration, DataViz, UI Design

PROJECTS

- State of Delaware top 1% student
- United States Presidential Scholar Nominee
- Delaware Secretary Scholar
- President's Award For Service