Position: <mark>Tumor Progression with Machine Learning Researcher</mark>

Location: Remote

Member Type: Unpaid Voluntary Internship

Organization Description

The Open Health Systems Laboratory (OHSL) is a public benefit corporation that builds, supports and manages project teams to improve research and diagnosis outcomes. We have technical expertise in utilizing the latest developments in information technology, namely informatics, communication, natural language processing, and data collection and mining to bring solutions to our clients.

OHSL was originally created in 2008 as a program of the International Network for Cancer Treatment and Research (INCTR) , a not-for-profit organization dedicated to helping build capacity for cancer research and treatment. In 2011, OHSL incorporated as an independent non-profit organization, and re-incorporated in 2017 as a public benefit corporation (B-Corp).

Internship Description

DICOM® — Digital Imaging and Communications in Medicine — is the international standard for medical images and related information. It defines the formats for medical images that can be exchanged with the data and quality necessary for clinical use. DICOM ® images include MRI scans and all associated images. MRI scans often return several types of image that weigh different parts of the brain.

Interns will explore the challenges regarding the prediction of tumor progression and use their CANDLE and Keras knowledge to build their own model for processing MRI images. Tasks include researching MRI image types, understanding the inner workings of CANDLE and its interactions with machine learning models, writing Python code using the Keras library, and summarizing findings in a blog post for OHSL.

This internship is a fantastic opportunity for high school students interested in pursuing careers in machine learning, especially as applied to biology.

Qualifications

- Currently enrolled in high school
- Advanced knowledge of Python, Keras, and CANDLE
- Familiarity with neural network architectures and implementations
- Need to have your own computer with Internet connection and a Python IDE

Hours

Summer interns are expected to work a schedule with a minimum of 30 hours per week. The internship can be extended beyond the summer and is flexible.

How to Apply

Apply at this link: https://ohsl.us/high-school-internship-recruitment-program
In your resumé, please include relevant coursework and extracurricular activities/hobbies.