FLYNN O'CONNELL

Research Scientist | Software Developer

FlynnOConnell@gmail.com | (518) 918-1741 | Binghamton, NY | linkedin.com/in/FlynnOConnell | github.com/NeuroPyPy

EXPERIENCE

Research Scientist

Binghamton University **December 2018 - Present Date. Binghamton, NY**

- Migrated all legacy data to SQL database utilizing Python and MATLAB
- Integrated Python and C++ API with current analysis pipeline
- Built locally hosted web platform for secure data sharing using Flask, Google Cloud and SQL
- Deploy and maintain version-controlled python, C++ and JavaScript libraries
- Built machine learning models with Tensorflow, Keras, SciKit-learn Python libraries
- Generated reports for statistical calculation, dimensionality reduction and graphical visualizations
- Improved performance of legacy applications by optimizing the SQL queries and vectorization
- Developed multiple pre-processing and signal-processing scripts using python, Cython, C++

EDUCATION

Bachelor of Science in Integrative Neuroscience & Psychology

State University of New York at Binghamton, 2018 | 3.61 Major GPA | Dean's list

LANGUAGES

Full Professional Proficiency: Python, C++, Cython, R, MATLAB
Professional Working Proficiency: HTML, TypeScript, JavaScript, C#
Limited Working Proficiency: Rust, Go, CSS
Databases: PostgreSQL, MySql, MongoDB
Other: Git, Linux/Unix, Bash

SKILLS

Libraries: OpenSSL, Tensorflow, Keras, Pytorch, Scikit-learn, Flask, Django, Pandas, Numpy, Matplotlib, Seaborn, Plotly, CPython, Pytest, Mypy

API: Google Cloud Computing (GCP), Google Python SDK's (BigQuery, Drive, Photos)

IDE: MS Visual Studio, Pycharm, VSCode, Spyder

PUBLICATIONS

1) **Sprague Dawley Rats Gaining Weight on a High Energy Diet Exhibit Damage to Taste Tissue Even after Return to a Healthy Diet**. *Nutrients. 2021 Aug 31.*
2) **Microglia Regulate Systematic Obesity and Neuroinflammation in a Sex-Specific and Diet-Dependent Manner**. *In-review.*
3) **Long Term In-Vivo One-Photon Ca2+ Imaging of Taste- Responsive Cells In The Parabrachial Pons In The Freely Licking Rat.** *Association for Chemosensory Neuroscience, 2022.*