# DOMENIC CERRI

*DATA SCIENTIST*

## CONTACT

 Chapel Hill, NC

**Portfolio** 
**LinkedIn** 
**GitHub** 

## SKILLS

Python (NumPy, Pandas, SciPy, Scikit-learn, Keras, Matplotlib, Seaborn)

Statistical Analysis (SAS, SPSS, Statistica)

SQL (SQLAlchemy, Postgres)

Bash

Git

Jupyter Notebook & Collab
HTML & CSS

Microsoft Office (Excel, Word, Powerpoint, Teams, VBA)

Project Management
Scientific Communication

## EDUCATION

**PhD**                                    2016

Behavioral Neuroscience
Neurobiology (minor)
UNC Chapel Hill

**BA**                                      2008

Psychology (4.1 GPA)
McDaniel College

## CERTIFICATIONS

**freeCodeCamp**          2022

Machine Learning
Data Analysis with Python
Scientific Computing
Relational Database
Responsive Web Design

## PUBLICATIONS 

## EXPERIENCE

### Postdoc / Research Scientist                    2016 – Present

Center for Animal MRI / UNC Chapel Hill

- Develop, adapt, and implement data organization, pre-processing, analysis, and visualization pipelines for preclinical 4D fMRI and multimodal time series data using Python, bash scripting, and specialized software packages
- Collaborate with machine learning experts for fMRI data dimensionality reduction, segmentation, and modeling
- Direct a large-scale, multicenter, multimodal project to identify neurochemical influences on neurovascular coupling
- Supervise and mentor research technicians and graduate students on lab protocols, data analysis, and scientific writing
- Communicate original research findings to internal and external audiences in formal presentations, which have earned multiple awards at international conferences
- Contributed to the conceptualization and writing of two successful multimillion-dollar federal grants

### Graduate Research Assistant                    2010 – 2016

Dept. of Psychology & Neuroscience / UNC Chapel Hill

- Conducted research projects from start to finish, leading to a federal grant covering 3 years of salary, 4 poster presentations at international conferences, and a first-author publication
- Developed and taught a full-semester course on behavior theory to UNC Chapel Hill undergraduates, receiving positive reviews
- Created, adapted, and implemented semi-automatic pre-processing and analysis pipelines for animal electrophysiology time series and quantitative behavior data using MATLAB, proprietary scripting languages, and Visual Basic in Excel
- Wrote C++ and proprietary state-notation scripts for low-latency, synchronized control and monitoring of I/O hardware systems

### Laboratory Technician                    2009 – 2010

Dept. of Anatomy & Neurobiology / University of MD, Baltimore

- Collected and pre-processed electrophysiology time series and quantitative and qualitative animal behavior and histology data
- Contributed to 5 peer-reviewed publications and 4 conference abstracts and presented a poster at an international conference
- Updated I/O controller hardware and MS-DOS C scripts for low-latency control and monitoring of animal behavior to run on Windows XP using C++ and high-priority threads