KARIN MORANDELL

Data Scientist | Neuroscience PhD



STRENGTHS

DATA ANALYSIS AND MODELING

Proficient several programming languages with experience in machine learning (deep learning, computer vision, AI, data modelling) and algorithm development for task designing.

VERSATILE NEUROSCIENCE EXPERTISE

Solid fundamentals with focus on sensory-motor neuroscience, brain-machine interface and mental health. Critical thinking and continuous learning mindset.

TEAM WORK AND MANAGEMENT

Proven track record of working, teaching and mentoring in diverse teams, effectively communicating complex scientific concepts through engaging presentations at renowned conferences. Published 5 scientific papers. Funded my research. Launched several networking events and a community-based organic vegetable delivery system for 60 NYU homes.

EXPERIENCE

Auditory Neuroscience Swiss National Foundation Postdoctoral Fellow

= 2019-2023

- New York University, NYC (Schneider lab)
- Project: Impact of behavioral states on sound processing and perception in mice.
 Skills: data processing pipelines, closed-loop task design, auditory virtual reality, sound processing, computational methods, machine learning, protocol writing, mentoring, science communication.
 - Morandell et al. (submitted to J. Neuroscience)

Postdoctoral researcher in Somatosensory Neuroscience

2018-2019

- **♀** University of Geneva (Huber lab)
- Project: Demonstrate how mice perceive vibrations through their paws.
- Skills: behavioral task design, closed-loop systems, automated behavioral tasks.

 Prsa, Morandell, Cuenu, and Huber (2019, Nature)

PhD candidate, specialisation Motor Neuroscience and Decision Making

- **2012-2017**
- ♥ University of Geneva (Huber lab)
- Project: Contribution of motor cortex to the planning and execution of forelimb movements.
- Skills: behavioral task design, scientific writing, science communication, automating behavioral training and analysis, MATLAB, JAVA.
 - Morandell and Huber (2017, Scientific Reports)
 - © Guo et al. (2014, PLOS One)

EDUCATION

PhD in Neuroscience (5.5/6, magna cum laude)

= 2012-2017

♥ University of Geneva

Masters in Physiology and Neuroscience

= 2009-2011

UPMC University (Paris VI)

Bachelor in Biology

2006-2009

♥ UPMC University (Paris VI)

SKILLS

- Statistical Analysis and Modeling
- Machine Learning
- Data Visualization
- Computer Vision
- Supervised and Unsupervised Learning

TECH LANGUAGES

Python (Tensorflow, Keras,

BeautifulSoup, scikit-learn)

MATLAB

C++

JAVA

HTML

LANGAGES

French

English

German

Italian

Spanish

ABOUT ME

PERSONALITY

- solution-oriented
- positive
- curious
- open-minded
- social

INTERESTS

- life science
- AI
- globetrotting
- diving
- dancing