Ning Mei

New York University

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Website: https://github.com/adowaconan

Open Science Framework: https://osf.io/chav7/

EDUCATION

2016

❖ New York University, New York, NY

   M.A in Psychology (General)

2014

❖ Arizona State University, Tempe, AZ

   B.A. in Psychology (minor in Statistics)

2012

❖ Guangzhou University of Traditional Chinese Medicine, Guangzhou, China

   B.S. in Applied Psychology

PUBLICATIONS and CONFERENCE POSTERS

Teng, X., Mei, N., Tian, X., & Poeppel, D. (2016). Auditory temporal windows revealed by locally reversing Mandarin speech. *Society for Neurobiology of Language,* Poster (co-first-author), Cognitive Neuroscience Society, 2016

Kim, T., Mei, N., Poeppel, D., & Flinker, A. (2015). A new acoustic space for hemispheric asymmetries. *Society for Neurobiology of Language,* Poster (co-first-author), Society for Neuroscience, 2015

Mei, N., et al., (2017). Identifying sleep spindles with multichannel EEG and classification optimization. *Computers in Biology and Medicine*. (Submitted)

AWARDS

Arizona State University, Dean's list   2013, 2014

Research and Internships

Fall 2014 – present

David Poeppel lab

➢ *MA research assistant*
- Running psychophysics experiments, MEG experiments, data analysis
- Ongoing project: Investigating hemispheric asymmetry in perceiving Mandarin Tones, in conditions of hums or lexical tones.
- github.com/adowaconan/Dichotic-Listening

Spring 2015 – Fall 2016

Catherine Good lab

➢ *MA research assistant*
- Experimental subject testing, data collection, data analysis
- Data analysis on how sense of belonging in math moderating self-estimation in different confidence levels

Spring 2016 – present

Timothy Ellmore lab

➢ *MA research assistant*
- Develop python/Matlab Input/Output interacting scripts/protocol for EEG data processing
- Selecting features to detect target brain wave patterns (i.e. spindles, k-complex, sleeping stages) in the signal
- Automatic pipeline of non-supervised models to detect spindles (https://osf.io/fc3u5/; github.com/adowaconan/modification-pipelines)

Fall 2016 – present
Data Science RoAD-Trip (Fund awarded)

- ➢ The RoAD-Trip Joint Data Science Plan (Mentor: Gaurav Pandey)
- ● Implementing machine learning algorithms to detect target brain wave patterns (i.e. spindles, k-complex)
- ● Implementing machine learning algorithm to classify sleeping stages within subjects (github.com/adowaconan/Spindle_by_Graphical_Features)

Spring 2017 – present

Denis Pelli lab

- ➢ *Research assistant*
- • Study of noise dynamic in visual grouping effect

Spring 2014

American Cancer Society Cancer Prevention Study – 3

- ➢ *Volunteer, Research assistant*
- • Recruiting subjects, social media research

Fall 2012-Summer 2014

ASU Changemaker center, Tempe, AZ

- ➢ *Volunteer*
- • Creating communities of support around new solutions/ideas

Fall 2009, Spring 2010

Canton Life Hot Line, Guangzhou, China

- ➢ *Intern*
- • Consulting, recording consulting results

Fall 2010, Spring 2011

Research team, prisoner emotional health, Guangzhou, China

- ➢ *Intern*
- • Collecting data about prisoners' mental health

Working experience

Fall 2012 to present

Varsity Tutor

> *Tutor*

- Multivariate Calculus, Linear Algebra, Trigonometry (high school and college levels), Statistics (i.e. research methods, analysis methods, simulation, signal detection theory), Mandarin, Programming data analysis

March 2013 to present

Translator, MCC Translation, Phoenix, AZ

SKILLS and CERTIFICATIONS

Computer Skills:

Excellent – Microsoft Office

- Word, Excel, Presentation, Poster Design

Excellent – Matlab

- Parametric tests, Nonparametric tests, Factorial analysis, Principle Component Analysis, Psychophysics Toolbox, Signal Processing Toolbox, Data Visualization, Scripts of Functions.

Excellent – Python

- Parametric tests, Nonparametric tests, Factorial analysis, Principle Component Analysis, Bayesian Model building, Model Evaluation, Data Visualization, Lambda Functions, Extensions of Python such as MNE-python (specialize in EEG, MEG data analysis), Sci-kit learn, Pandas, Theano, Tensorflow, Pytorch, and PyMC3
- Import and export excel, matlab, SPSS, and SAS files. Extract, transform, and load databases.
- Psychophysics experiment via psycopy

Excellent – SPSS

- Parametric tests, Nonparametric tests, Factorial Analysis, Principle Component Analysis, Independent Component Analysis

Excellent – R

- Parametric tests, Nonparametric tests, Factorial Analysis, Principle Component Analysis, probabilistic computation
- Shiny – interactive graphs
- ggplot, data visualization

Good – Letax Editor
- Equations and special effects in presentation slides, posters

Beginner – Julia
- Julia ikernel interacting with Jupyter projects

Skills:

- Courses taken: Calculus/Analytic Geometry I – III, Probability, Mathematical statistics, Simulation and Data Analysis, Mathematical Tools for Psychology and Neuroscience

Statistics Skills:

- Parametric statistics, Non-parametric statistics, Factorial Analysis, Principle Component Analysis, Independent Component Analysis, Least square regression, Multivariate regression, Step-wise hierarchical regression, Logistic regression, Bayesian Inference, Machine Learning Cassification(python sci-kit learn, Theano, tensorflow, pytorch).

Language:

- Cantonese, mother tongue

- English, read – excellent, speak – intermediate, write – intermediate

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Current Project

- Investigating hemispherical difference in processing acoustic cues and lexical cues of Mandarin Tones using dichotic listening paradigm (https://github.com/adowaconan/Dichotic-Listening/blob/master/show_data.pdf)

- Implementing machine learning techniques in detecting spindles from EEG nap data (part 1, https://osf.io/fc3u5/; github.com/adowaconan/modification-pipelines; part 2, githum.com/adowaconan/Spindle_by_Graphical_Features)

ACADEMIC REFERENCE

- Adeen Flinker, supervisor of project 1. adeen.flinker@nyu.edu.

- Xing Tian, supervisor of project 1. xing.tian@nyu.edu.

- Timothy Ellmore, principle investigator and supervisor of project 2 part 1. tellmore@ccny.cuny.edu, 212-650-5714//212-650-5696

- Gaurav Pandey, supervisor of project 2 part 2. gaurav.pandey@mssm.edu