# OMRANK. SAFI

Email: osafi@psych.ubc.ca

Website: https://omransafi.github.io/

#### **EDUCATION**

**Bachelor of Arts in Psychology** 

University of British Columbia Specializing in Cognitive Psychology 2020

**High School Diploma** 

Point Grey Secondary Graduated with honors

2015

## RESEARCH EXPERIENCE

**Research Assistant** Present

Memory and Imagination Lab – University of British Columbia

- Investigating the relationship between emotion and temporal memory
  - Examining relationship between emotional arousal and temporal proximity judgements
  - Developing a study aiming to examine how emotion affects temporal judgements in episodic future thought

### **Tracking Independent Information Signals Across Brain Regions**

Present

Motivated Cognition Lab – University of British Columbia

Supervisors: Dr. James Kryklywy and Dr. Rebecca Todd

- Project focused on methodological innovation for neuroimaging analysis
- Analysis of emotional and sensory communication information in the brain
- Statistical analyses and graphical representation using R
- Matrix manipulations in MATLAB
- Neuroimaging processing and displaying done in AFNI
- RSA script in Python

Senior Thesis\* 2020

Behavioral Sustainability Lab - University of British Columbia Motivated Cognition Lab – University of British Columbia

Supervisors: Dr. Jiaying Zhao and Dr. Rebecca Todd

- Examining the affective responses produced by VR induced overview effect and its effect on climate change attitudes
- Produced novel idea of examining relationship between the overview effect and climate attitudes
- Conducted literature review

<sup>\*</sup>Data collection disrupted due to Covid-19

- Created study design and protocol
- Completed and obtained ethics approval (UBC BREB)
- Rendered stimulus in Unity 3D Model of Earth
- Collect, record, and analyze subject data
  - o Heart Rate, Galvanic Skin Response, and Questionnaires

## **Behavioral Sustainability Lab**

2019-Present

University of British Columbia

- Worked on my senior thesis examining the consequences of the overview on climate change attitudes
- Completed and obtained ethics (UBC BREB)
- Dynamic model of Earth created in Unity
- Coded aspects of the environment in C# (atmosphere, cloud movement, earth rotation)
- Coded player movement scripts in C#
- Coded Oculus Rift headset and Oculus controller integration in C#
- Prepared surveys in Qualtrics measuring several psychological variables (PANAS-X, AWE-S, INS, Climate Concern)
- Learned use of Empatica E4 wristband to collect physiological data (Heart Rate & GSR)
- Learned to use QRSTool, an open source software, to analyze physiological data

# **Behavioral Reward Affect & Impulsivity Neuroscience (BRAIN) Lab** 2019 - 2020 University of British Columbia

- Project focusing on using the MUSE (portable EEG headband) to assess implicit craving in clinical populations with concurrent stimulant use and mental disorders
- Project aiming to use the MUSE headband to identify a novel biomarker for craving and relapse
- Worked on ethics applications for new studies and add-ons for ongoing studies
- Presented poster at Psychiatry Research Day

### **Motivated Cognition Lab**

2018 - Present

University of British Columbia

- Worked on study investigating the influence of physiological arousal on reward
- Head research assistant for experiment examining attentional biases and emotion
- Received supervision for senior thesis
- Learned proper EEG usage electrode handling and running participants
- Learned EEG preprocessing and data analysis (EEGLAB & ERPLAB)
- Worked on project aiming to find a novel analysis technique for fMRI data
- Learned to use Analysis of Functional NeuroImages (AFNI) an open source environment for processing and displaying fMRI data

### **PUBLICATIONS, POSTERS, & PRESENTATIONS**

Paper – Balance, B.C., Tuen, Y., Petrucci, A.S, Orwig, W., Safi, O.K., Madan, C. R., Palombo, D. J. (2021). Imagining Emotional Events Benefits Future-Oriented Decisions. <a href="https://doi.org/10.31234/osf.io/5hf9z">https://doi.org/10.31234/osf.io/5hf9z</a>

**Presentation – Safi, O.K.** (2020). Tracking Independent Information Signals Across Regions of Interest. UBC Cognitive Area Workshop.

**Poster Presentation – Safi, O.K.,** Tommasi, M. (2020). Carbon Footprint Information Promotes Sustainable Food Choices. Northwest Cognition and Memory (NOWCAM) Conference.

**Poster Presentation – Safi, O.K.,** Li, A.C., Cheng, A.F., Schuetz, C.G. (2020). Assessing Cue-Induced Craving in Individuals with Methamphetamine Addiction Through Portable EEG Technology. Department of Psychiatry 2020 Virtual Research Day.

**Paper – Safi, O. K.,** Tommasi, M., Sun, B., Thornley, J., Dodani, A. (2020). Carbon Footprint Information Promotes Sustainable Food Choices. UBC SEEDS. <a href="https://open.library.ubc.ca/cIRcle/collections/undergraduateresearch/18861/items/1.0392724">https://open.library.ubc.ca/cIRcle/collections/undergraduateresearch/18861/items/1.0392724</a>

**Poster Presentation – Safi, O.K.,** (2020). Climate Change, Affect, and The Overview Effect. UBC Psychology Undergraduate Research Conference\*.

**Paper – Safi, O. K.,** Hughes, B. (2018). Evolutionary Plausibility of Connectionist Models of Cognition. *Cognitive Systems UBC*. Displayed on program website.

### **SKILLS**

Programming Languages: C, C#, Python, R, HTML/CSS

Statistical Programs: R, SPSS, JASP, G-Power

Experimental Technology: PsychoPy, QRSTool, Afni (Neuroimaging), MATLAB,

EEGLAB & ERPLAB, Qualtrics

Web Frameworks: WordPress, Weebly, Squarespace

Visual/Audio Programs: Unity, Adobe Photoshop, Adobe Illustrator, Audacity Natural Languages: English, Dari, Farsi, Hindi, Urdu, Spanish, German (Learning)

### **AWARDS & ACCOMPLISHMENTS**

# **Visiting Philosopher**

2018

## University of Pittsburgh, Department of Philosophy

• Worked with other visiting academics on a wide range of issue in philosophy of science

<sup>\*</sup>Poster accepted but conference cancelled due to Covid-19

- Areas discussed included laws of nature, thought experiments, scientific controversy, confirmation theory, ethical issues in science, and modern technologies
- Funding provided by Pittsburgh University's Center for Philosophy of Science

## **Grant** 2018/2019

## **Arts Undergraduate Society (AUS)**

- Wrote grant application and secured a club operation grant from the AUS
- Amount: \$1000

# Cognitive Systems Podcast (CogsCast) Official Podcast of UBC CSS

2017 - 2020

- Cofounder and host
- Podcast discussing and examining various topics of interest in Cognitive Science
- Topics include, but are not limited to, consciousness, intelligence, psychedelics, and emerging technologies

### **Vice President Media**

2019 - 2020

## **Cognitive Systems Society (CSS)**

- Responsible for the Cognitive Systems Podcast (CogsCast)
- Responsible for improvement and maintenance of the CSS website
- Responsible for monthly newsletter
- Involved in planning and running academic events throughout the year

# **Vice President Arts External**

2018 - 2019

## **Cognitive Systems Society (CSS)**

- Cognitive Systems representative to the Arts Undergraduate Society (AUS)
- Established a working relationship between the AUS and the CSS
- Successfully secured AUS club grant
- Involved in planning and running events for the CSS and AUS

### **CERTIFICATIONS**

## **VCH Privacy and Confidentiality**

2019

Vancouver Coastal Health

### **Ethical Conduct for Research Involving Humans**

2016

Tri-Council Policy Statement 2: CORE

### **MEMBERSHIPS AND AFFLIATIONS**

Cognitive Science Society: Member (2020)

Cognitive Systems Society: Member (2017-2020), Executive (2018-2020)

**UBC Psychology Students Association:** Member (2019-2020)

**UBC Arts Undergraduate Society:** Departmental Representative (2018/2019)

## COMMUNITY AND VOLUNTEER ACTIVITIES

### **Volunteer at Technical Career Fair**

2020

University of British Columbia

An annual fair held in January at the University of British Columbia that provides students the opportunity to meet with industry employers

## **Planning Committee Member**

2018

Life Sciences Research Night – Undergraduate Research Opportunities
An annual event held at the University of British Columbia that aims to educate and inspire undergraduate students about research and how to get into research

### **Imagine Day Orientation Leader**

2017

University of British Columbia

Provided orientation to incoming undergraduate students and provide ongoing support throughout their first year of university

**Peer Mentor** 2011 – 2015

Best Buddies Canada

Paired with a student with an intellectual and/or developmental disability

Participated in activities throughout the year – coffee, movies, skating, basketball, etc.