Coding Emotional Expressions in Dementia Patients and Caregivers

Robert Levenson

Supervisor's name and email address: Alice Hua (ahua@berkeley.edu)

Location: On-campus: Tolman Hall

Website: http://socrates.berkeley.edu/~ucbpl/

Description of Research:

Dementia, particularly frontotemporal dementia, can lead to impairments in social and emotional functioning; such changes are often misunderstood and accurate diagnosis can be difficult, particularly in the early stages of the illness. Using a wide array of dynamic stimuli, we apply a fine-grained socioemotional assessment to identify domains of loss and preservation in frontotemporal dementia and related illnesses, such as Alzheimer's disease. Measures include behavioral, autonomic, and experiential indicators, during tasks that cover a spectrum of functioning, from basic emotional reactivity, to empathy and emotion regulation, to complex social interactions. In addition, we examine relationships between these lab-based measures and biological markers. Through this multi-method, interdisciplinary work that spans psychology, neurology, and affective neuroscience, we aim to contribute to improvements in clinical diagnosis and care, as well as to basic understanding of socioemotional functioning and aging.

Caring for a loved one with dementia is a meaningful part of family life, but can also create a significant burden for caregivers. Dementia caregivers are at a heightened risk for physical and psychological problems. Thus, using the same measures mentioned above, we have begun a new project to study the role that emotion plays in understanding the relationships among patient deficits, caregiver burden, and caregiver health in caregiver spouses of patients with neurodegenerative disease. With this work, we hope to a) determine how specific patient deficits influence caregiver burden and the emotional quality of the caregiver-patient relationship; b) understand how the emotional quality of the caregiver-patient relationship links caregiver burden with caregiver health problems; and c) understand how caregivers' level of emotional functioning and genetic polymorphisms influence their vulnerability and resilience to caregiver burden and the associated health problems.

Description of Student Responsibilities:

Research assistants (RAs) will be required to attend weekly 1-1.5 hour meetings starting mid to late Fall 2017 semester to learn how to code facial behavior using the Emotional Expressive Behavior System (EEB). RAs will be expected to complete homework assignments in addition to meetings to practice coding facial behavior. RAs will be signing up for a maximum of 10 hours of lab work per week.

All RAs will be considered on a "work trial" for their first 3-6 months. Because coding facial behavior requires high reliability between coders, coders who do not improve in their coding during the first 3-6 months will not be part of the coding team. Given that it takes several months to learn this highly detail-oriented skill, research assistants will be expected to be in the lab for at least one year (preferably two years). We are looking for highly motivated, detail-oriented, and conscientious RAs. It is also preferred that RAs understand the confidentiality requirements associated with working with patient data.

Learning how to code facial behaviors is an incredibly unique skill. RAs who join the coding team will be eligible for letters of recommendation, particularly for jobs that inquire about research skills. RAs can also continue to pick up additional responsibilities if discussed with the graduate student. While learning how to code, there are many opportunities to learn about the types of research questions that these data contribute to.

Application process:

Please submit a resume and brief cover letter. If selected from this initial phase, you will meet with the graduate student who will be leading the facial coding training team for a brief interview, and meet with the lab manager for a brief interview. If selected to be an RA in the lab, you will meet with the lab manager for a brief orientation.

Application deadline: Open until filled.
PSYCH 199 Reacher Assistant Postings FALL 2017

Modeling working memory and reward-based learning

Supervisor's name and email address: Anne Collins (annecollins@berkeley.edu)

Main Contact email address: saah.master@berkeley.edu

Location: On-campus: Tolman Hall 5308

Website: https://www.ocf.berkeley.edu/~acollins/

Description of Research:

Over the course of our lives we learn to make the choices that will maximize reward. As a young adult, you have probably figured out that eating a donut is more rewarding than eating a plain piece of bread. As such, you are more likely to choose to eat the donut. You have also learned more complex behaviors for maximizing reward, like the long-term strategies involved in earning good grades or the praise of your professors. Our question is: How do we learn those complex strategies? How do we generalize our previous knowledge to adapt quickly to new environments? Which brain systems contribute to learning from reward, and how do they interact to produce those behaviors?

The proposed research plans to investigate learning and decision making in healthy young adults. We use computerized tasks to probe how multiple systems contribute to let us learn efficiently in different situations; and how these different systems interact with each other. In this particular project, we investigate how rewarding outcomes influence how we act.

This research project is going to focus heavily on data analytics and computational modeling. Using both new and existing data sets, the students are going to work with the mentor on producing mathematical models of decision-making. Undergraduates will also spend time analyzing and processing neural data, like that obtained through EEG.

Description of Student Responsibilities:

First, the student will be involved in experimental design and the writing of experimental code in Matlab/Psychtoolbox, or in Javascript for online testing in Amazon Mechanical Turk. They may also be responsible for the recruitment and testing of human subjects. The undergraduate researcher will be involved in building and testing mathematical models of reinforcement learning and working memory. Additionally, the undergraduate will be involved in analyzing behavioral data.

Application process:

Applicants should have a strong background in a quantitative field, such as mathematics or computer science. Knowledge of neuroscience or cognitive science is not necessary, but interest in either topic is required. Students who have previously worked in or taken a class on computational modeling are encouraged to apply, though any students with a basic understanding of modeling and/or programming are welcome to. Students must be motivated, organized, and reliable.

Applicants who meet these criteria are encouraged to apply through Anne Collins's URAP project entitled "Modeling working memory and reward-based learning."

Application deadline: Open until filled.
Team Chemistry and Reputation in Major League Baseball (MLB)

Dacher Keltner

Supervisor’s name and Email Address: Horia Jazaieri (Horia@berkeley.edu)

Location: On-campus and remotely

Position Available: Fall 2017, Spring 2018, Summer 2018

Description of Research:

The proposed research will examine personal reputation and team chemistry within major league baseball (MLB) players and teams. The central goal is to understand the processes that underlie the formation and maintenance of personal reputation and team chemistry/team cohesion through a series of studies that implement a multi-method approach. Study designs include qualitative data collection, gathering video and narrative accounts (and subsequent qualitative data coding), watching interviews and games and coding based on set coding procedures, etc.

Description of Student Responsibilities:

Research assistants will be involved in several stages of this research including:

1. Reading empirical articles and performing literature searches and reviews to aid in study design and provide substantive background for designing studies and manuscript preparation.
2. Gathering video and narrative accounts of players and teams of interest.
4. Assisting with the organization and management of data.

Application process:

Interested research assistants should email their CV, availability, and interest in baseball to horia@berkeley.edu

Application deadline: Open until filled.
Approach Motivation and Cognitive Control

Dr. Sheri Johnson

Supervisor's name and email address: Kiana Modavi (kmodavi@berkeley.edu)

Location: On-campus: Tolman Hall

Website: http://calmprogram.wixsite.com/calmania

Description of Research:

We are examining the transdiagnostic effects of extremes in subconstructs of two domains of functioning. The first, approach motivation, examines how much individuals value reward and how much effort they will exert to attain reward. The second is cognitive control, more specifically, response inhibition. These functions have distinct neural, cognitive, and behavioral signatures. These functions also have profound deficits in various psychopathologies. Much current work looks at one of these 2 functional dimensions at a time. We will examine these 2 dimensions simultaneously across self-report, behavioral, and fMRI measurements.

Description of Student Responsibilities:

Assisting senior team members with recruitment (e.g. distributing study flyers, screening participants), participant communication (phone screenings, scheduling, reminders), data collection (running participants through experimental sessions), data coding and management, and other administrative tasks (e.g., literature searches) as needed.

We are seeking students with class schedules to accommodate session scheduled throughout the week. Punctuality, professionalism, and a careful and conscientious demeanor are imperative. Because this project may involve working with participants with mental health diagnoses, strong interpersonal skills and comfort with interacting with research participants is required.

Application process:

Please email your resume and cover letter to calmprogram@gmail.com, and mention which project you are interested in through our lab.

Application deadline: Open until filled.
Anger Intervention Study

Dr. Sheri Johnson

Supervisor's name and email address: Mackenzie Zisser (mzisser@berkeley.edu)

Location: On-campus: Tolman Hall

Website: http://calmprogram.wixsite.com/calmania

Description of Research:

This study is testing an anger intervention targeting people with verbal or physical aggression difficulties and high levels of impulsivity. The purpose of this study is to teach various techniques to identify and reduce aggressive tendencies.

This intervention uses online treatment sessions, a mobile device app, and (in a smaller sample) wristband tracking devices to collect self-report data, experience sampling (daily journaling) data, and physiological data.

Description of Student Responsibilities:

Assisting senior team members with participant communication (recruitment, phone screenings, scheduling), data management, and data coding and analyses.

Application process:

Please email your resume and cover letter to calmprogram@gmail.com, and mention which of our projects you are interested in.

Application deadline: Open until filled.
PSYCH 199 Reacher Assistant Postings FALL 2017

Changes in Cognition and Viewpoint

Ozlem Ayduk

Supervisor's name and email address: Jessica Jones (jessjones12@berkeley.edu)

Location: On-campus: Tolman Hall

Description of Research:

Recent research suggests that the language people use to refer to the self during introspection influences the narratives they construct about the self, and as a consequence, how they think, feel, and behave under stress (Kross, Bruehlman-Senecal, Park, Burson, Dougherty, Moser & Ayduk, 2014). More specifically, using non first person pronouns such as you/he/she and one’s own name (i.e., third-person talk) rather than first-person pronouns such as “I” or me (i.e., first person talk) during introspection enhances self-distancing, which in turn, leads people to construe upcoming stressors in less threatening terms, experience less negative affect and perform better during the stressful situation. Drawing from these findings, the current research aims to understand the intrapersonal mechanisms that underlie third-person self-talk.

Description of Student Responsibilities:

Research assistants will be primarily responsible for running participants through each of the studies. RAs will schedule participants, send reminder emails the night before, and arrive at the experiment room at least 10 minutes prior to subjects to prep the room. Once participants have arrived, RAs will obtain written consent and acquaint the participants with each study. During the study, RAs will monitor subject progression and provide instruction. After each subject session has finished, RAs will be responsible for reliably removing subject response data from the computers and saving to an alternate location. RAs will also be responsible for coding subject responses for appraisal themes.

RAs may also be asked to perform relevant literature searches if needed, which will build a foundation of knowledge for current and future projects. Although not required, RAs will be given the opportunity to assist in stimulus presentation design and prepare data for statistical analysis, and may have the opportunity to learn applied statistical methods for behavioral research.

Application process:

Please complete the following survey:

http://ucbpsych.qualtrics.com/jfe/form/SV_0k5WZGP3SU1RYpL

After I’ve received your completed response, I will review it and get back to you within 2 weeks.

Thank you for your interest in our project!

Application deadline: Open until filled.
Improving Cross-group Relationships in the Digital Age

Dr. Rodolfo Mendoza-Denton

Supervisor's name and email address: Amanda D. Perez-Ceballos (adpc@berkeley.edu)

Location: On-campus: Tolman Hall

Website: https://rascl.berkeley.edu/people.html

Description of Research:

The current research seeks to examine the potential role that the internet can play in facilitating cross-group contact and friendships. This project will focus on studying the underlying mechanisms of the formation of positive online cross-group friendships. For the project, closeness inductions will be implemented into interventions. The overarching goal of the project is to see whether a closeness manipulation will be effective in decreasing anxiety and in turn improving cross-group relations.

Description of Student Responsibilities:

Research assistants will be taught to use Amazon Mechanical Turk to recruit participants online for the sessions as well as the Qualtrics survey platform to distribute the experiment. The two main responsibilities are recruiting participants online and running online sessions. Research assistants will also attend lab meetings with the supervisor of the project in order to check in on how sessions are going. Research assistants will be given the opportunity to work with data and gain experience with data analysis in R and R Studio. No prior research experience is required.

Application process:

Download and fill out the following application packet and email to adpc@berkeley.edu. https://berkeley.box.com/s/f7jw49n3v6iqacwma315nxgiffi79m6r

Application deadline: Open until filled.
Neural Mechanisms of Working Memory

Mark D'Esposito

Supervisor’s name and email address: Jason Scimeca (jason_scimeca@berkeley.edu)

Location: On-campus: Giannini Hall

Website: http://despolab.berkeley.edu/main/pages/history

Description of Research:

Short-term working memory (WM) is essential for our ability to maintain information about stimuli that are no longer present in the environment. This ability is instrumental to cognitive success, and is widely associated with academic learning, reasoning, and general intelligence. There is a severe limit, however, on the quantity and quality of information that WM can store, and this limit has been considered a primary constraint on human cognition. Likewise, lower WM capacity is associated with clinical conditions like schizophrenia, ADHD, and traumatic brain injury. Although WM is essential to so many facets of cognition, there is little consensus on the psychological and neural mechanisms that support successful memory.

Previous research has shown, for instance, that the prefrontal cortex is involved in maintaining WM information during distraction, while the superior parietal cortex is sensitive to the amount of information that is maintained. We don't, however, know the precise causal contributions that these regions make to the temporary maintenance of internal information. The goals of this project are to identify 1) how brain networks configure and interact for memory maintenance using functional magnetic resonance imaging (fMRI), and 2) how particular network nodes are causally involved in those processes using noninvasive magnetic brain stimulation (TMS).

Description of Student Responsibilities:

The student will be responsible for training participants on a memory task, collecting data for computer-based behavioral experiments, assisting with fMRI and TMS data collection, and performing basic analyses and quality control assessment of the MRI data. The student will be trained in basic neuroimaging (fMRI) and brain stimulation (TMS) techniques. In addition, the student will be encouraged to learn and contribute to the development of Matlab analysis scripts to investigate participants’ patterns of behavioral responses in the memory task. The student will gain experience with fMRI and TMS research, and develop an understanding of how current neuroimaging methods can be used to investigate questions about human memory. In addition, the student will be encouraged to attend weekly lab meetings, as well as bi-weekly working memory journal club meetings, where they will have the opportunity to interact with Dr. D’Esposito and other lab members. Day-to-day work in the lab will be supervised by a post-doc or graduate student involved in this project.

Application process:

Interested students should email jason_scimeca@berkeley.edu with your name, major (or intended major), and expected graduation date. We will reply to all emails with a short questionnaire to collect additional details about your availability, relevant coursework/experience, research interests, etc.

A strong interest in psychology and cognitive neuroscience is necessary. There is a preference for students that have completed (or will be simultaneously taking) psychology, biopsychology and/or cognitive neuroscience courses. Strong organizational skills and conscientiousness are essential. Basic programming skills are preferred but not required. At least three blocks of 2-3 hours a week are required to apply for this project.

Application deadline: Open until filled.
Mitigating the Double Bind in Computer Science: A Sociocultural Narrative Intervention

Victoria Plaut

Supervisor’s name and email address: Lyndsey Wallace (lwallace@berkeley.edu)

Main Contact Email: vplaut@law.berkeley.edu

Location: On-campus: Boalt Hall

Website: https://www.law.berkeley.edu/culture-diversity-intergroup-relations-lab/

Description of Research:

Dominant stories exist about who is a computer scientist and who is not; however, girls of color do not figure as protagonists of these stories despite the fact that many are involved in science. Additionally, society has historically made it difficult for girls of color to embrace multiple identities simultaneously (Purdie-Vaughns & Eibach, 2008), such as their self-concept as girls of color and as scientists. This project involves a social psychological intervention for increasing the participation of girls of color in computer science and STEM more generally. The researchers partnered with a STEM summer program for kids of color that has succeeded in increasing computer science engagement but with lower rates among female alumni of the program. The intervention implemented within the program uses personal storytelling to alter the structural realities, cultural narratives and psychological processes of girls of color in order to reduce this gender gap. The intervention combines research on value affirmation (Cohen et al., 2006), cultural narrative (Thompson, 2014) and ambient belonging (Cheryan, Plaut, Davies, & Steele, 2009). Encompassing this research, the intervention encourages girls to engage in dynamic discussion integrating science and culture, and allows them to create objects that will be used to signal belonging within STEM and computer science domains. Effects of the intervention on engagement, belonging, and performance will be examined. This project has applications for education, business (e.g., tech), and social science.

Description of Student Responsibilities:

Undergraduate research apprentices will facilitate the coding and transcribing of qualitative data gathered through different mediums, as well as participate in project meetings.

Specific qualifications students should have...

Undergraduate research apprentices are expected to have excellent skills in organization and time management, be detail-oriented, reliable, and able to work well with others. Commitment to the lab for more than one semester is desirable. Time commitment per week is approximately 9-12 hours but can be negotiated.

Application process:

To apply for this position please send a cover letter and CV to the CDIR lab manager Lyndsey Wallace at lwallace@berkeley.edu.

Application deadline: Open until filled.
Emotions and the Self

Dacher Keltner
Supervisor: Yang Bai
Main Contact Email: kxl@berkeley.edu
Location: On campus
Website: http://socrates.berkeley.edu/~keltner/

Description of research:
Emotions are ubiquitous and consequential. Emotions are defined as the brief multi-component responses to challenges or opportunities that are important to the individual's goals, particularly social ones. In recent decades, research has begun to focus on the interrelation between emotions and the self. An emerging line of research shines light onto the significance of emotions in orienting the individual to self-relevant challenges and the opportunities in the social context, such as sources of peril, injustice, or affection, thus enabling appropriate courses of action. In our lab, we focus on specific emotions, such as awe, contentment, and envy, in untangling their unique interactions with different self-relevant processes.

Description of student responsibilities:
Responsibilities for research assistants will include: reviewing and writing literature reviews; editing and practicing academic writing; learning and contributing to research design; and scheduling and running experiments. We require commitments of 4-6 hours per week. Perfect addition to Resumes.

Application process:
If you are interested, please send along your CV and the following information:
1) Major and year in school
2) Completed coursework in Psychology/other Social Sciences (e.g., English, History, Philosophy, Sociology) and GPA
3) Prior research experience (not needed)
4) Language skills
5) Number of hours available per week.
6) Written skill. Please send ONE page writing sample to us.
Qualified applicants will be notified and will be expected to come in for a brief interview.

Application deadline: Open until filled.
PSYCH 199 Reacher Assistant Postings FALL 2017

Lab Session Assistants

Iris Mauss

Supervisor’s name and email address: Emily WillrothMain (ecwillroth@berkeley.edu)

Location: On campus: Tolman Hall

Website: https://eerlab.berkeley.edu/

Description of research:

This ongoing project is focused on how people regulate their emotions in the face of stress. We are interested in the contexts in which particular strategies are helpful and harmful.

Description of student responsibilities:

Lab session assistants will be trained to collect physiological and behavioral data from undergraduate participants. Training will require attending three or four 1.5 hour sessions per week for 2 or more weeks. After training, students will run their own lab sessions, in which they will interact with female undergraduate participants, apply physiological sensors and monitor physiological data collection, answer participant questions, and debrief participants at the end of the study.

Application process:

To apply, please email Emily at ecwillroth@berkeley.edu with your availability, your interest in the lab, any relevant experience, and a CV or resume if you have one.

Application deadline: Open until filled.
Language and Cognition in Children and Adults

Mahesh Srinivasan

Supervisor’s name and Email Address: Catherine Berner (catherineberner@berkeley.edu)

Location: On campus: Tolman Hall

Website: http://lcdlab.berkeley.edu/

Description of research:

The Language and Cognitive Development Lab is a member of the Institute of Human Development, and the UC Berkeley Psychology Department. Our research focuses on how children learn different aspects of language, what this might tell us about the nature of cognitive and social development, and how these different aspects of development interact.

Description of student responsibilities:

The goal of our Undergraduate Research Assistant Program is to provide a comprehensive, hands-on research experience to highly motivated students, while making valuable contributions to cognitive science. This program is ideal for students who are highly motivated in going to graduate school in psychology, cognitive science, linguistics, or related fields and/or students who are interested in working toward an undergraduate honors thesis. Students will work closely with the professor, the lab manager, graduate students, postdoctoral fellows, and each other, and will be involved in many facets of the research process, such as reading relevant theoretical and empirical papers, assisting with data collection and study design, creating stimuli, recruiting participants, processing or analyzing data, and programming experiments. Students may also test participants at schools and/or museums in the Bay Area. Lastly, students will have the opportunity to attend lab meetings and to present on the projects they are assigned. The outcome of these activities will be an enriched understanding of the core concepts of developmental psychology, cognitive science, language acquisition, and of the scientific method.

Application process:

Please see the LCD Lab website for more information about how to apply.
http://lcdlab.berkeley.edu

Application deadline: 08/29/2017
Social and Moral Decision-Making in Sport

Elliot Turiel

Supervisor's name and email address: Amy Banas (amyb@berkeley.edu)

Location: On-campus

Description of Research:

Questions we explore:
How do people make decisions about social and moral conflicts (particularly involving aggression or physical harm)? Does the context (say, sport vs school vs daily life contexts) influence this decision-making process? Do different types of people (say, athletes vs non-athletes) reason differently when confronted with such conflicts?
The study draws on theories of social and moral development and developmental psychology. Data is collected mainly through the clinical interview method.

Description of Student Responsibilities:
Tasks will include transcribing, some reading, helping code and clean data, and attending a weekly meeting. Students can expect to learn about developmental psychology, as it relates to social and moral development and aggression. Students interested in research design and/or who wish to go deeper in the theory will have the opportunity to learn. Meetings will take place in the Social and Moral Development Lab in Tolman Hall.

Application process:
If interested, please email your resume and a brief paragraph stating your interest to Amy Banas: amyb@berkeley.edu

Application deadline: Open until filled.
PSYCH 199 Reacher Assistant Postings FALL 2017

Golden Bear Sleep and Mood Research Clinic
(Depression Treatment Study and Transdiagnostic Sleep & Circadian Rhythm Study)

Dr. Allison Harvey

Supervisor’s name and Email Address: Melanie Tran (m.tran@berkeley.edu)

Location: On campus

Website: https://www.ocf.berkeley.edu/~ahsleep/

Description of research:
The Golden Bear Sleep and Mood Research Clinic is currently working on two studies. While treatments for depression have improved over the years, a need exists to improve treatments for Major Depressive Disorder (MDD) because a proportion of patients do not respond to existing treatments. Of those who do, the majority relapse. Meta-analyses confirm Cognitive Therapy (CT) as a frontline treatment, with patients less likely to relapse than those on antidepressant medications alone. Despite these impressive outcomes, there is room for improvement, as only one third of all patients respond to treatment and last a year without relapse. The purpose of our Depression Treatment Study is to improve treatment in order to provide lasting benefits for people with depression.

Our ‘TranS-C’ study is testing the effectiveness of a transdiagnostic sleep intervention for adults with severe mental illness in community mental health clinics throughout Alameda County. This study investigates an intervention to improve sleep and seeks to ensure that the findings are generalizable to the real world.

Description of student responsibilities:

Students will be assigned to various lab crews based on interest and demonstrated skills. There may be opportunities in the future to be involved in more advanced projects with direct clinical exposure. Students must be able to commit to around 10 hours of work per week for a minimum of one school year. Some weeks will be lighter than others, but having the flexibility to work 10 hours a week is required. Research assistants have the opportunity to support the study in the following ways:

Data Crew
Duties will include data entry of a variety of study information. Data entry experience is preferred, but not required. Working knowledge of Excel and Google Sheets, MS Access and R is preferred and would be helpful in fulfilling the role.

Coding Crew
Students that demonstrate excellent attention to detail and dedication to the project may be eligible to participate in the Coding Crew in which they will code CT treatment videos. Familiarity with CBT and behavioral coding experience is a plus, but not required. There will be a coding task to determine eligibility for joining the coding team.

Administrative and Other Tasks
Students will help project coordinators with aspects of the study including collecting sleep diaries (calling participants daily to collect sleep data over a week-long period), recruiting participants, preparing for sessions, doing post-session tasks, accompanying staff to psychological assessments and treatment sessions at participants’ homes (though this happens less frequently and will depend on scheduling), and various administrative tasks.

RA Meetings
RAs will attend weekly or biweekly meetings to gain a greater understanding of the research process, gain professional development skills (e.g., CV workshops, graduate school workshops, etc.), get to know one another, and experience being a part of a research team!

Application process:

Please send a brief cover letter detailing your interest in the study, psychology classes you have taken, relevant experiences, and expected graduation date. Please also attach a resume or CV, and send it to m.tran@berkeley.edu.

Application deadline: Open until filled.
The Walker Lab

Supervisor’s name and Email Address: Aubrey Rossi (arossi@berkeley.edu)

Location: On campus

Description of research:

The Walker Lab is currently looking for an undergraduate RA to assist with a new experiment. This experiment aims to investigate how sleep deprivation may affect critical workplace behaviors such as teamwork, decision making, honest report, and effort discounting in addition to how it may affect activity within brain regions correlated with these behaviors.

Description of student responsibilities:

The person selected to help with this project will have the rare opportunity to work directly with Professor Walker and myself on the development and design of the tasks for this experiment. Depending on how long he or she decides to continue with the project, there may also be opportunity to gain experience with fMRI data analysis and collection.

The RA’s main responsibilities will be to provide assistance with the following: writing the code for computer generated tasks, data collection and consolidation, and literature review.

Strong programming skills with python and roughly 5-10 hours of commitment per week are required.

Application process:

Please contact the lab manager, Aubrey Rossi directly at arossi@berkeley.edu

Application deadline: Open until filled.
Eye Tracking Applied in Autonomous Driving

Prof. Whitney

Supervisor’s name and Email Address: Ye Xia (yexia@berkeley.edu)

Location: Tolman Hall

Website: https://deepdrive.berkeley.edu/

Description of research:

This study is a collaborative project with EECS department. This study uses eye tracking techniques to study human drivers’ eye movement pattern during driving and applies this knowledge to improve autonomous driving models.

Description of student responsibilities:

1. Learn how to use an eye tracker
2. Run an eye track to collect human eye movement data
3. Proofread manuscripts

Application process:

Please send your resume to yexia@berkeley.edu. Applicants will be asked to proofread a short paragraph of a manuscript. Interviews may be required.

Application deadline: September 3, 2017
The Micro Lab in the Haas School of Business is currently looking for research assistants who can work 9-11 hours per week. If you are interested, please contact the lab manager, Vivian Lo at vivlo@berkeley.edu. Please include your resume and/or CV, as well as a list of relevant courses.

Our project is related to nonverbal communication in power, status, race, prejudice, and prosocial behavior. This is work with a number of colleagues and students at Berkeley and elsewhere. We are looking for 2 RAs at about 10 hours a week per RA. This is working directly with Dana Carney and Vivian Lo.

Students will also assist in the coding of videotapes, harvesting information from the internet, scoring social network data, finding research papers that tell us what each nonverbal behavior predicts, and other aspects of managing, running and organizing research experiments. They may help with grant-writing, and there will likely be lots of data collection this term both running human subjects and coding videotapes and photos.

Ideal research assistants are willing to work about 10 hours a week. Sometimes this might mean coming into the RA office to do the work; other times you can do it in the computer lab or at home. Most of the time will be running research subjects, however. Previous research experience is desirable but not essential – particularly in social psychology. Proficiency with Excel and knowledge of how to use SPSS are both pluses as are special skills in programming, video editing, website making, and photoshop and photography.

We are happy to give credit for Psych 99/199 if you are interested in receiving credit for your research hours.

Related website: http://faculty.haas.berkeley.edu/dana_carney/
Explicit instruction of reading comprehension strategies: Effect on d/Deaf adolescent students’ strategy use and reading comprehension

Faculty Member: Mahesh Srinivasan

Principle Investigator’s Name and Email Address: Maryam Salehomoum, marmar71s@berkeley.edu

Location: Research Assistant and Principle Investigator will meet on UCB campus

Position Available: Position intended for Fall 2017; may be extended to Spring 2018

Description of Research: The Principle Investigator is completing a dissertation study focused on examining the effects of explicit instruction of reading comprehension strategies (e.g., identifying unknown words and deriving meaning from context, using images in text, summarizing); a literacy intervention study. The participants are 4-5 deaf or hard of hearing adolescent students. Each participant will be meeting 1:1 with the Principle Investigator, twice a week, to: read expository text, verbalize their thoughts and strategies as they read, compose a written summary of the assigned reading, respond to comprehension questions, and receive explicit instruction regarding effective strategies to improve comprehension. Explicit instruction will consist of a discussion of which strategies to use and why. Instruction will also consist of a review of participants’ written summaries and strategies for improving them. The proposed intervention plan aims to improve the participants’ metacognitive skills (i.e., awareness of their own strengths vs. comprehension difficulties) and to provide participants with specific evidence-based strategies for better dealing with difficult text.

Description of Research Assistant Responsibilities: We are seeking a Research Assistant with sign language proficiency. The Research Assistant will be engaged in the following:

(a) meeting 1-2 hours per week with Principle Investigator for discussion and training;
(b) completing inter-rater reliability checks for two hours of video recorded intervention sessions per week (i.e., Research Assistant will view video recorded sessions and, using a checklist, identify the participants’ use of targeted comprehension strategies);
(c) completing intervention fidelity checks for the same two hours of recorded sessions per week (i.e., Research Assistant will view recorded sessions and, using a checklist, note the researcher’s consistency/accuracy in using a pre-determined and defined series of intervention components).

Total time commitment per week is estimated to be 4-8 hours.

Application Process: If interested, please email Maryam Salehomoum: marmar71s@berkeley.edu

Application Deadline: Open until filled
Emotion Regulation and Social Interaction

Ozlem Ayduk

Supervisor’s name and email address: Craig L. Anderson (clanderson@berkeley.edu)

Location: On-campus

Description of Research:
This study examines how different emotion regulation strategies impact social interactions that people have. During sessions, research assistants will obtain informed consent from participants, guide them through a survey, and then engage in a social interaction with the participants.

Description of Student Responsibilities:
No previous research experience is required for this project. High levels of organization, punctuality, and professionalism are required as research assistants will be responsible for scheduling participants, and running participants in the protocol. A minimum of 5 hours of availability each week is required for this project.

As a key feature of the study involves engaging in a social interaction with participants, research assistants must be comfortable having conversations in English with other people about experiences that elicit strong emotions.

Application process:
To begin the applications process, applicants should email Dr. Craig Anderson (clanderson@berkeley.edu) with a statement of purpose and resume with "Social interaction project" in the subject.

Application deadline: Open until filled.
The Effect of Oxytocin on Cohesion and Teambuilding

Dacher Keltner

Supervisor's name and email address: Craig L. Anderson (clanderson@berkeley.edu)

Location: On-campus

Description of Research:

The goal of this project is to investigate how the administration of the neuropeptide oxytocin affects team cooperation and cohesion in small groups of three. Under research assistant supervision, groups will participate in state-of-the-art computer simulations designed by cognitive scientists designed to objectively assess cooperation and team performance.

Description of Student Responsibilities:

Experience on this project will be ideal for students interested in pursuing graduate-level studies or medical school. This research will involve running college-aged participants through a series of computer tasks, properly administering oxytocin using a nasal-spray device, collecting physiological data (e.g. ECG), entering data into computer databases, and cleaning data in preparation for analysis. Successful candidates may also have the opportunity to assist in data analysis and help in the preparation of scientific presentations.

Applicant Qualifications:

1. Applicants are expected to be able to dedicate at least 10 hours to the lab per week consisting of at least two 4-hour blocks, and to commit for the entire 2016/17 academic year. It is possible to gain course credit for working on this project.

2. Excellent communication and organizational skills.

3. The ability to actively contribute as a team player, manage details, track participant progress, think creatively, work independently, and meet deadlines.

4. Previous research experience is preferred, but not required.

Application Process:

Applicants should email a resume and a short statement of purpose to Dr. Craig Anderson at clanderson@berkeley.edu.

Application deadline: Open until filled.