Project #1: Develop a social network computational model (2.5 mil grant with LAEP (lead), Eng, Disabilities)
Graduate student, five years of funding, 15-18K/yr, most of tuition covered.

Colleagues and I will be developing a number of simulation models, as well as gathering empirical data on persons living with disabilities. I will be leading the development of a computational model to classify the social environment and networks of individuals with disabilities. Ideally, we will create this using R (R isn’t a requirement, but being a strong programmer is). The model visually and statistically represents the social ties and their strength, density, clustering, and social proximity for individuals and groups. Within model analysis will be conducted using a multi-trait multi-method (MTMM) confirmatory factor analysis (CFA) model. Ultimately, the social network model will indicate an individual with disability’s degree of integration in the community’s social environment. The social network model(s) will represent a unique database on its own, as there is little application of social network research of this type with individuals with disabilities.

Project #2: Coding in gaming engine to study spatial memory and wayfinding (800K grant with LAEP (lead) and Psychology)
Graduate student, two years of funding, salary 15-18K/yr, most of tuition covered.
Undergraduate student(s), up to 10K available

The students will be spending much of their time coding within the Unity gaming engine. I will need support developing analytics of location-based tracking, possibly eye tracking and scripts to facilitate novel navigation concepts. This work will be deeply integrated in psychological fundamentals, but also in gaming theory and design. We will be collecting a substantial amount of data and will need to develop metrics to analyze the meaning of this data associated with the psychological phenomenon. Plenty of spatial stats, some java scripting, C# and DB.

Contact to learn more:

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