Zachary Ingbretsen

382 N. Main St., West Lebanon, NH 03784 • zach@zingbretsen.com • (631) 987 - 1475
https://www.linkedin.com/in/zingbretsen

EDUCATION

Dartmouth College, Hanover, NH
June 2011
GPA: 3.49/4.0

Bachelor of Arts: Major in Neuroscience with Honors
Relevant Courses: Discrete Mathematics, Intro to Computational Neuroscience, Intro to Computer Science

RELATED EXPERIENCE

Social Cognitive and Neural Sciences Lab, Dartmouth College, Hanover, NH
July 2012-Present

Lab Manager/Software Development Assistant

- Designing and building webMT in JavaScript/PHP, a framework to collect mouse-tracking, ratings, and survey data online.
- Developing desktop version of MouseTracker:
  - Proposed and developed UDP interface in VB6 to allow to interact with other applications locally or over a network
  - Improving algorithms for calculating trajectory metrics
  - Designing automatic-exclusion algorithm for bad trials
  - Bug fixes
- Writing/maintaining scripts to automate data processing using Python, Matlab, and VBA in Excel that have saved days of manual work.

Norris Social Neuroscience Lab, Dartmouth College, Hanover, NH
July 2011 – June 2012

Lab Manager

- Wrote Python scripts to process AFNI output files (fMRI data) and convert them to a form usable in SPSS.
- Programmed experiments in e-Prime for fMRI, EEG, EMG, and behavioral studies. Experiments included a dot-probe paradigm, finger imitation, and event -related brand recognition designs (using video clips), which required inline coding in E-Basic.
- Configured fMRI eyetracker for use in experiment (which required several systems to work together), and wrote scripts to process the data in Matlab.

ADDITIONAL EXPERIENCE

Merchant Mechanics, West Lebanon, NH
April 2012 – Present

Senior Consultant for Integrated Research

- Coding experiments and data processing scripts (e.g., to link EEG and eye-tracking data)
- Training staff on best practices in psycho-physiological research.

COMPUTER SKILLS

Languages:
- Proficient in: JavaScript/jQuery, CSS, HTML, Python (2/3), Matlab
- Familiar with: Visual Basic 6, Visual Basic for Applications, e-Basic, PHP, Java, bash, SQL, R, AutoHotKey

Software:
- Vim, Matlab, TortoiseSVN, Microsoft Excel, VirtualBox, WAMP, Eclipse

Platforms:
- Microsoft Windows (XP, Vista, 7), Linux (Mint, Ubuntu, Fedora), Unix