# **Alexander Conrad Nied**

Preferred Name: Conrad

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**Objective** 

Engineering or Product Management Internship.

Field: Social Computing, Technology-mediated Communication

## Education

**Ph.D.** (in progress), Computer Science and Engineering, *University of Washington*, 2013-present Conducting research with: Gary Hsieh, Sean Munson

**B.A.**, Computer Science, *Boston University*, GPA: 3.75. Minor in Anthropology

2007-2011

# **Employment**

Research Assistant, Human Computer Interaction Lab, *University of Washington* 2013-present Current Project: *Data Mining Personal Values to Improve Online Deliberation*: Making a system to steer discussion in a constructive direction and create common ground by informing users of the values implicitly invoked in the discussion. Part of this is a data mining problem, using NLP or crowdsourcing to derive values from text, and part of this is a problem in creating a system that creates positive outcomes and does not cheapen discussion, but rather enriches it.

*Prefab User Study*: Evaluated internal software, an interface to modify UIs by reverse engineering their structure.

One Bus One Minute Away: Made alternative machine learning models to improve accuracy of bus arrival time predictions, used kNN and kernel regression.

Software Engineering Intern, Mobile Input Research Group, Google

Android Keyboard Feature: Product Design, Data Collection, Machine Learning, Live
Implementation, User Study, Viability Analysis.

Clinical Research Coordinator, Neuropsychology Lab, Massachusetts General Hospital 2011-2013

Various Neuroimaging Experiments: Examined the way our brains interpret language using EEG, MEG and MRI experiments. Programmed, Recruited, Conducted, and Analyzed. Used machine learning techniques such as clustering, network analysis, Kalman filters, and Granger causality.

Graphical Processing Stream: Made a Matlab GUI to automate the data processing pipeline and provide interactive feedback for users unfamiliar with programming.

Undergrad Research Assistant, Speech Lab, Boston University

2010-2011

Cortical Phoneme Perception: Created a model of phoneme discrimination with a self-organizing neural network.

CultMap: Simulated the spread of cultures over 2D, geographically constrained areas.

#### Skills

Programming Proficient: Java, Matlab. Intermediate: Android, Python Visualization Excel, Tableau, Inkscape, Gimp, D3, HTML/CSS/Javascript

Languages Native: English. Intermediate: Spanish, German

# <u>Publications</u>

Dixon M, Nied A, Fogarty J. Prefab Layers and Prefab Annotations: Extensible Pixel-Based
Interpretation of Graphical Interfaces.

UIST 2014

Gow D, Nied A. Rules from Words: A Dynamic Neural Basis for a Lawful Linguistic Process.

PLoS ONE 2014

## Presentations & Posters

Gow D, Nied A. Phonotactic Effects Come From the Top-Down: Evidence From Granger Analysis of Multimodal Imaging Data.

Psychonomics 2012

Gow D, Nied A, Ahlfors S. A graphic user interface-based automated processing stream for Granger analysis of source space reconstructions of MEG/EEG data.

Biomag 2012

Nied A, Ahlfors S, Gow D. Top-down influences produce a regressive phonotactic effect in speech perception. ICCNS 2012

Nied A, Terzi E. Simulating Influence on a Global Scale.

**NEUCS 2010** 

## Teaching Experience

Teaching Assistant, CSE332: Data Abstractions, *University of Washington*, Q4 2014

Teaching Assistant, CSE373: Data Structures and Algorithms, *University of Washington*, Q4 2013