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INTERESTS

practical e-democracy	sign language music
social recommenders	meditation techniques
computer security	social neuroscience of empathy
game design	neural correlates of consciousness
Tuftian visualization	non-linear writing systems
brain/computer interfaces	language creation

EDUCATION

University of Chicago 2011 (expected)
 M.A. Social Science, emphasis in Social Neuroscience
 Thesis: How motor imitation and imagery correlate with emotion recognition accuracy and confidence

University of California, Berkeley 2006
 B.A. Cognitive Science; emphases in Computer Modeling, Cognitive Neuroscience, & Linguistics

WORK EXPERIENCE

Independent consultant 2005–present
 Assisting clients with full stack Ruby on Rails coding, application / game design, refactoring, security auditing, statistical analysis, user interface/experience design, etc. Latest was NeoEdge Inc., designing new social meta-games and improving design of existing products.

Language Creation Society (LCS) *Founder & Chairman of Board* 2006–present
<http://conlang.org>
 Lead foundation of 501(c)3 nonprofit from start to finish. President from 2006–2011. Initiated and extensively organized the *Language Creation Conference* three times, both front and back end. Handled all legal matters, from incorporation documents to consulting contracts. Negotiated contract with HBO to create the language Dothraki for the new TV series *Game of Thrones* and refereed job applications. Managing editor of new peer-reviewed journal, *Fiat Lingua*. Conducted many audio interviews for *LCS Podcast* with notables in the field (e.g. Tom Payne, Sylvia Sotomayor, Suzette Haden Elgin, Arika Okrent, Tony Harris). Edited audio for early interviews.

Zynga Inc. *Producer, Social Games* 2008
<http://zynga.com>
 Developed, refactored, expanded, and managed six online games totaling up to ~500k unique daily active users and ~30 million installs, in Ruby on Rails. Lead social games "silo", planning and implementing new apps & games extended from existing products, reporting to CTO. Administered 18 Fedora 8 servers w/ memcached, mysql, mongrel, thin, etc. Designed & deployed major internal statistical analysis project to answer complex questions about performance, design, revenue, retention, engagement, & virality, with millions of data points per day.

UC Berkeley *DE-Cal teacher* 2005–2006
<http://conlangs-decal.livejournal.com/info> Video: http://bit.ly/conlang_decal
 Created and taught two semester-long classes about how to create a new language from scratch (from phonology through pragmatics).

Medtronic Inc. (MDT) *Consultant* 2005–2008
<http://medtronic.com>
 Worked directly with MDT Director of International Relations. Contributed to and researched major international projects. Compiled project lists, wrote business letters and called decision makers, made preliminary action plans and project analyses, helped develop standard operating procedures, attended industry conferences for networking and project identification, etc. Initiated, designed, and deployed a major, secure, web-based RoR database application to manage projects, contacts, leads, tasks, process automation, etc.

Massage therapist 2004–present
 Syncretic style based on 396 hours certified training in a wide range of techniques.

PROJECTS

- Non-linear Fully 2-dimensional Writing Systems* 2006–present <http://saizai.com/nlws.shtml>
Theoretical description of a radically different kind of writing system which explicitly uses two dimensional grammar; analogous to current writing systems as a multi-directional graph is to an array. Implementing such a system since 2010 w/ Alex Fink.
- CSS Fingerprint* 2010 <http://github.com/saizai/cssfingerprint>
Security research project on flaws in CSS & JavaScript specs. Improved previous algorithms, enabling involuntary inspection of ~0.5-5 million URLs in user's browsing history per minute, creating a fingerprint with reliable demographic data and resilient against history wiping, use of separate browser/computer, etc. Used support vector machine (SVM) and Bayesian inference systems. Lead directly to vulnerability fix in FireFox 4.0 and related browsers.
- Prototype Idle Timer* 2010 http://github.com/saizai/prototype_idle_timer
Event-based JavaScript idle timer for Prototype supporting multiple timers & observers and element-specific timers
- Rails Authorization Plugin* 2009 <https://github.com/saizai/rails-authorization-plugin>
Expanded standard Rails security plugin to handle anonymous users in a robust way (with per-object roles, etc)
- Metaphysical Plant (MIT Puzzle Hunt team)* 2009–present <http://ihavetofindpeach.com/puzzles>
Team won 2009, wrote 2010. Coauthored puzzles *Making the Possible Impossible*, *A Modern Palimpsest*, *The Path More Stumbled*, and *Mario Clash*, and contributor on *Pattern Recognition*.
- Gripping language (w/ Alex Fink)* 2009–present <http://bit.ly/griplang>
New language communicated entirely by touch, with unique design features for succinctness, meta-conversation, exploitation of tactile medium, privacy, etc. Subject of video documentary by Jake Sollins.
- Zombie Simulator (w/ Alex Fink)* 2009 <http://saizai.livejournal.com/946759.html>
Significantly improved previous infection simulator to create military class with “nuclear” option, better zombie tracking, etc.

PUBLICATIONS

- TSA Rights flyer* 2010 http://saizai.com/tsa_rights.pdf
Two-page flyer detailing civil rights at TSA checkpoints, with full citations and contact information. Discussed in forbes.com blog.
- Conlanging 101 (w/ Alex Fink & David Peterson)* <http://conlang.org/cl101.pdf>
26th Chaos Communications Congress proceedings, p. 167 <http://events.ccc.de/congress/2009> ISBN 978-3-934636-08-8-0
Monochrom #26-34, p. 5 <http://www.monochrom.at/mono> ISBN 978-3-9502372-6-9
Theoretical, historical, social, and applied introduction to the art of language creation.
- Meditation for Hackers: All-Point Techniques* 2008 <http://saizai.com/2600meditation.pdf>
Adapted excerpt from book in progress, focusing on one unusual category of meditation techniques, published in *2600 Magazine*.
- On the Design of an Ideal Language* 2006 <http://community.livejournal.com/conlangs/14524.html>
Early essay discussing design parameters for an engineered language, necessary tradeoffs between desirable features, and how to balance them. Assumes idiosyncratically axiomatic design aesthetics but objective way to fulfill any given desiderata.

PRESENTATIONS

- Cognitive Psychology for Hackers* 2010 <http://youtube.com/watch?v=uJAuAuGboOM>
27th Chaos Communications Congress http://saizai.com/cogsci_talk.pdf
Discussion & demonstration of perceptual illusions, priming, biases, heuristics, and unconscious influences, along with ways to detect, exploit, and protect against them.
- Conlanging 101* 2009 http://bit.ly/cl101_26c3vid
26th Chaos Communications Congress, Notacon 7 <http://saizai.com/cl101.pdf>
Discussion & live demonstration of language creation, in which the audience co-creates a new language on the spot.

Meditation for Hackers 2009, 2010 http://saizai.com/meditation_workshop.pdf
Noisebridge, Toorcamp 2009, 26th & 27th Chaos Communications Congress, Notacon 7
Applied workshop practicing several very different meditation techniques, discussing dozens of variants, including details of dissociative-hypnotic brainwashing techniques used by certain cults.

Free space file systems 2009 <http://saizai.com/fsfs.pdf>
26th Chaos Communications Congress
Proposal of a novel thin steganographic file system that stores data in the “free” space of a host file system.

Introduction to anti-telemarketer law 2009 <http://saizai.com/tcpa.pdf>
Toorcamp 2009
Discussion of US federal & California laws regulating telemarketers and how to take action against abusive telemarketers.

Applied Morphology & Vocabulary Generation 2007 http://saizai.com/lcc2_workshop.pdf
Workshop w/ David Peterson & Donald Boozar teaching a creative approach to morphology; first using tinker toys to allow participants a more abstract view of potential interactions of morphemes, then applying these ideas to standard phonology using nonce morphemes.

LANGUAGES

Human	conversational	American Sign Language, French, Russian, Spanish
	low intermediate	Japanese
Programming	advanced	Ruby, Rails, MySQL, HTML
	intermediate	JavaScript, Prototype / Scriptaculous, CSS

OTHER

Red Cross CPR for professional rescuers & First Aid certified
17 years classical piano; 5 years harpsichord; 1 year flute; 3 years ocarina
Hobbies: backpacking, sewing, woodworking, chainmail, ASL music interpretation, martial arts, language creation, AI experimentation