

MIRO ENEV

<http://miro.enev.us>
miro.enev@gmail.com
510.410.4577

GOAL

Build a career as a data scientist based on expertise in **machine learning/AI**, **software engineering**, and **experimental design** with past applications to **smart sensors (IoT)**, **computer security and privacy**, as well as **computational neuroscience**.

EDUCATION

Doctor of Philosophy - University of Washington - 2014

Department - Computer Science and Engineering

Thesis - Quantitative Privacy Attack and Defense Frameworks in Emerging Tech. Ecosystems

Master of Science - University of Washington - 2011

Department - Computer Science and Engineering

Bachelor of Arts - U.C. Berkeley - 2005

Major - Cognitive Science - Computational Modeling Focus

Minor - Computer Science

EXPERIENCE

2016-...	NVIDIA - Deep Learning Solution Architect and Data Scientist
2016	Phyn LLC, [Belkin & Uponer] - Principal Data Scientist
2014-16	Belkin International - Senior Machine Learning Engineer @ Water & Electricity
2008-14	University of Washington - Ph.D & R.A. - Comp. Sci. & Engineering
2013,14	Harborview Medical - Consultant - Data Science & UX Design
2010	Intel Labs - Intern - Privacy Preserving Data Transformations
2007,08	Todorov Lab, UCSD - Postgrad RA - Computational Models of Optimal Human Movement
2006	Blumenfeld Lab, Yale Univ. - Postgrad RA - Models of Epilepto-genesis/propagation
2003-05	Ivry Lab, U.C. Berkeley - Ugrad. RA - EEG Signal Analysis for Brain-Computer-Interfaces
2002	Prudential Securities - Intern - Analysis of Asset Structure
2001	Supply Chain Consultants - Intern - Software Testing & Web Development

SKILLS

Data Science:

supervised learning : ensemble learning methods [regression, trees, kernel/SVMs, neural nets, etc.]

unsupervised learning : clustering, dimensionality reduction, hypothesis generation from data structure

statistical methods : experimental design and hypothesis evaluation, bootstrap/resampling

distributed computing : Hadoop, MapReduce, Spark

Communication:

data story-telling, interactive visualization

Cyber Security and Privacy

privacy defenses using feature space transformations based on user value policies

privacy breaking attacks using unintentional side channels and machine learning

Cognitive Science and Computational Neuroscience:

experimental design, probabilistic models of human behavior under uncertainty

optimal control theory applied to biological movement

brain-computer-interfaces, functional and structural neuro-imaging, EEG analysis

Software Engineering:

languages: Python, Java, C++/C, Matlab, JavaScript, XHTML, SQL, D3

Publications

Automobile Driver Fingerprinting. PETS 2016, Germany,

Miro Enev, Alex Takakuwa, Karl Koscher, Tadayoshi Kohno.

Televisions, Video Privacy, and Powerline Electromagnetic Interference.

Miro Enev, Sidhant Gupta, Tadayoshi Kohno, Shwetak Patel.

18th ACM Conference on Computer and Communications Security. 2011

SensorSift: Balancing Sensor Data Privacy and Utility in Automated Face Understanding.

Miro Enev, Jaeyeon Jung, Liefeng Bo, Xiaofeng Ren, Tadayoshi Kohno.

Annual Computer Security Applications Conference (ACSAC). 2012

Learning and optimization of novel sensorimotor feedback loops.

Miro Enev, Emanuel Todorov.

Masters Thesis - University of Washington. 2010

Imaging onset and propagation of ECT-induced seizures.

Miro Enev, K. McNally, G. Varghese, G. Zubal, R. Ostroff, Hal Blumenfeld.

Epilepsia. 2007

Neocortical and thalamic spread of amygdala kindled seizures.

Hal Blumenfeld, ... Miro Enev, Hitten Zaveri.

Epilepsia. 2007

Simultaneous EEG, fMRI, and behavior in typical childhood absence seizures.

Rachel Berman, ..., Miro Enev ..., Hal Blumenfeld.

Epilepsia. 2010

Where fMRI and electrophysiology agree to disagree: cortico. and striatal activity patterns in the WAG/Rij rat.

Asht Mishra, ... Miro Enev, ..., Hal Blumenfeld.

Journal of Neuroscience. 2011

Software Released - <http://homes.cs.washington.edu/~miro/sensorsift>

PPLS Algorithm (SensorSift)- Balancing Utility and Privacy in Sensor Data

Other Projects - <http://homes.cs.washington.edu/~miro/>

Parallelization of the Viterbi Algorithm. - GPU based HMMs

Identifying Users from Mouse Movements. - gender distinction, and user ID

Tracking Hand Movements - dynamic-time-warping and vector embedding query methods.

Teaching	2009,11	Computer Security - CSE 484 - TA - University of Washington
	2008	Natural Computation - Cog Sci 684 - TA - U.C. San Diego
	2007	Cognitive Consequences of Technology, Cog Sci 10 - TA - U.C. San Diego
Leadership	2011-14	Graduate Student Mentor - 2 mentees per class - University of Washington
	2008	Project Lead - Amgen Scholars Program - U.C. San Diego
	2012	Youth Soccer Coach - 3 Age Groups [3-6][6-9][9-12] - Greater Seattle
	2004-05	Philanthropy Chair - Chi Phi Fraternity - U.C. Berkeley
2003	Special Olympics Coach - Basketball - U.C. Berkeley	
Awards	2011-14	Intel Science and Tech. Center - Fellow - Pervasive Computing - University of Washington
	2006-08	National Science Foundation IGERT - Fellow - U.C. San Diego
	2001-05	Diamond State Scholar - Undergraduate Fellow - U.C. Berkeley
	2001	F.I.R.S.T. Robotics - Team [DuPont] 1st Place in International Competition