

Matthew Burns

Data Scientist

- Email me on Indeed: [indeed.com/r/Matthew-Burns/d6f6262954ae744f](https://www.indeed.com/r/Matthew-Burns/d6f6262954ae744f)

Ex-Navy Seal with BSEE from UCSD seeking entry-level QA/DSP roles.

Attended UCSD from 2009 to 2013, earning the BSEE. Started PhD program at UCSD in 2014, but realized my passion is developing products and not pure research.

EXPERIENCED WITH

- Java, MATLAB, C++, Python, Linux. Strongest language Java.
- Cloud computing, big data: AWS, MapReduce
- Deep learning: MLP, CNN, RNN, TensorFlow
- Classification, regression, prediction
- Research, publication
- Teamwork, leadership

Authorized to work in the US for any employer

WORK EXPERIENCE

Data Scientist

Swartz Center for Computational Neuroscience (SCCN) - 2011 to 2015

part- time work while attending UCSD for BS/PhD) - Scott Makeig, Prof. Ken Kreutz-Delgado

- Applied Least Squares regression (i.e. LTI modeling) to estimating Event Related Potentials (ERP) from EEG signals. Successfully increased signal to noise ratio compared with current techniques (i.e. averaging). Presented at the 2013 IEEE Engineering in Medicine and Biology Conference (EMBC).
- Integrated ERP regression research into a Matlab toolbox as a plugin for EEGLAB: SCCN's flagship software package. This offers a nested regression capability, which is crucial to analyzing high dimensional EEG datasets with hierarchical experimental design (Matlab).
- Applied Apache Hadoop to processing large numbers of EEG datasets (Python).
- Co-developed iterative algorithm based on The Alternating Direction Method of Multipliers for convex regularization of ERP regression parameters (Matlab).
- Deployed Brain Computer Interface software (BCILAB, by Christian Kothe) to Amazon Elastic Compute Cloud (Linux, Java, Matlab).

Special Warfare Operator

U.S. NAVY - 2001 to 2009

- Trained over 200 Filipino soldiers during Foreign Internal Defense (FID) missions in Republic of the Philippines.
- Protected Prime Minister of Iraq for six months as agent on personal security detail (PSD).
- Designed five Theater Security Cooperation (TSC) exercises in The United Arab Emirates, Kuwait, Oman and Saudi Arabia. Managed \$500,000 budget and 10,000+ man-hours for each exercise.

EDUCATION

B.S. in Electrical Engineering

University of California - San Diego, CA

LINKS

<http://github.com/mattb243>