

MICHAEL HORVATH

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EDUCATION

University of Kansas

BS Psychology and Statistics *GPA: 3.6*

Lawrence, KS

Grad: May 2011

EXPERIENCE

Embrace Healthwear

Software Engineer

San Diego, CA

Sept, 2017 — Present

- Data analysis and machine learning for motion sensor signal data, with emphasis on seamless pipelining and mapping research literature to procedural findings. Data preprocessing, vectorization and feature engineering in preparation for supervised and unsupervised classification. Python, binary classification, time-series analysis, database engineering, mysql, principal component analysis.

Personal Projects

Jan 2017 — Aug 2017

- Developed a neural net constructor from the ground up in Elixir, to improve understanding of machine learning at its most basic level. Applied constructor to solve Rubiks cube.
- Trained Long Short Term Memory network on cryptocurrency data to predict market volatility. Wrote trading algorithm based on machine learning predictions.
- Deployed various machine learning programs, ranging from style-transfer to binary-classification, regression, and multi-class classification, on Google Cloud Computing platform to evaluate performance across various hyperparameters. Explored optimal neural net configurations and validation techniques.

University of Kansas

Program Evaluation Consultant

Lawrence, KS

Sep 2010 — May 2011

- Reconstructed the ARC Self-Determination Scale - a 72 item self-report metric for use in reporting self-determination among students with learning disabilities. Presented findings to authors and collaborators. New version, with shortened length and increased validity and reliability is included in the latest iteration of the National Longitudinal Transition Study (NLTS-2), administered by the Department of Education.
- Collaborated with Program Evaluation Team to assess and evaluate various inter-departmental education grants for the purpose of grant submission, evaluation, and renewal.
- Developed, deployed, and administered training grant evaluation surveys, gathering outcome data concerning program success and student outcomes.

SKILLS

Programming languages: Python, Elixir, JS, Node
Statistics: Regression, ANOVA, SAS, SPSS, MPLUS
Machine Learning: Classification, PCA, time-series, feature engineering

AWARDS

CalTech Signature Award

Innovative and Creative thinking in mathematics and sciences.

Kansas City, KS

May 2006

National Merit Scholar

Outstanding academic and extra-curricular achievement.

2006