# Kyle M. Shannon

# Entrepreneur | Data Scientist

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San Diego, CA LOCATION
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# SKILLS

TECHNICAL	ANALYTICAL	INTERPERSONAL
Python, PostregSQL, MongoDB	Machine Learning, Deep	Story Telling, Mentoring,
Neo4j, Hadoop, Spark, Git, Unix,	Learning, Statistical Analysis,	Teaching, Data Visualization,
AWS, Photoshop, Illustrator,	EDA, A   B Testing, Data	Communicating Insight from
Tableu, D3.js	Cleaning	Data

# **PROJECTS**

#### MASTERS THESIS PROJECT - LUNG NODULE DETECTION USING MACHINE VISION

- · Designed a convolutional neural network using ResNet weights to localize and classify cancerous nodules
- Engineered a data processing pipeline to clean and format ~200gb of CT Scans.
- · Implemented Intel's Neon framework with CUDA SDK drives in a local linux environment

#### PREDICTING AMAZON REVIEW HELPFULNESS RATIO

- Trained models using: XGBoost, LASSO and Ridge Regression, Elastic Net and Random Forests
- Achieving a mean absolute error of 0.175 compared to a baseline model score of 0.261
- Engineered features to maximize variance in dataset and used feature selection techniques to minimize feature space

#### **EXPERIENCE**

# LEAD DATA SCIENTIST & CO-FOUNDER - TURNKEY TRIPS, LLC | FEB 2016 - PRESENT

- Funded start-up working with rural non-profit transportation orgs to equip them with modern, custom transit software
- · Designing and developing predictive models for carpooling and trip chaining to reduce costs and deadhead miles
- Authored NYSERDA proposal seeking \$250k to fund development of software and data analytics
- Developed PostgresSQL OLTP DB and OLAP NOSQL data warehouse for analytical queries and reports

#### DATA SCIENTIST - BOOZ ALLEN HAMILTON | FEB 2014 - SEPT 2015

- · Refined human capital and learning metrics and built data dashboards
- Cleaned, processed and analyzed large (~2,000,000 rows x 50 cols) CSV data sets
- · Recommended process improvement changes to reduce hospital inventory waste and maximize employee efficiency
- Built predictive models assisting optimizing hospital purchases aiding in an \$1.2 million ROI over contract term

#### STAFF SCIENTIST - BACKYARD BRAINS INC. I AUG 2011 - JULY 2013

- Developed neuroscience educational lesson plans: https://backyardbrains.com/experiments/
- Published nerve conduction velocity research in the Journal of Advances in Physiology Education (APE)
- Co-authored NIMH SBIR grant, which was awarded at over \$2 million

#### RESEARCH ASSISTANT- UNIVERSITY OF CALIFORNIA, SAN DIEGO I 2010 - 2012

### **EDUCATION**

Deep Learning Micro Degree - DeepLearning.AI | expected 2018 Master's Data Science & Engineering - UCSD | expected 2018 Machine Learning & Data Analyst NanoDegree - Udacity | 2016 B.S. Cognitive Neuroscience - UCSD | 2012