

# KYUCHO

Data Scientist  
Machine Learning Engineer

[www.qcho1010.com](http://www.qcho1010.com) | [qcho1010](https://github.com/qcho1010) | [qcho1010](https://www.linkedin.com/company/qcho1010) | [qcho1010@gmail.com](mailto:qcho1010@gmail.com) | [\(+1\) 636-579-3120](tel:+16365793120)

"Nothing is Impossible; We Just Haven't Found the Way Yet. "

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Formulating Effective Business Outcome Matrix to Build ML Model and Conveying Insights from Complex Model to Clients is the Key to Succeed in Data World.

## PROFESSIONAL EXPERIENCE

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### Lead Data Scientist at Object Computing Inc (Feb 2019 – Present • 7 mos)

- Working for Fortune 500 company clients such as Mastercard, Bayer, and Purina and partnering with Google to solve one of the challenging problems
- Video/Image Analysis, Video/Image Segmentation, Streaming NLP, Time Series Analysis, and Forecasting Analysis

### Sr. Data Scientist at Ascension Health (Oct 2017 – Feb 2019 • 1 yr 5 mos)

- Built A.I. (Not Black Box) System which Provides the Well Explainable and Interpretable Clinical Treatment Solution Using Advance Machine Learning, Optimization Algorithms such as Deep Learning and Evolutionary Computation.
- Built recommender system for the Sepsis treatment for the optimal treatment while reducing the total direct cost. Resulting estimated total saving of \$300mill saving in a year.
- Built the model to seek high Opioid users to prevent the opioid crisis.

### Principal Data Scientist at MIMH (Jan 2017 – Present • 2 yrs 8 mos)

- Performing Advance Explanatory Analysis to Find the Insight of the HIV Disease Prevention and the Treatment.
- Working Directly with NIH, NIMH, and Government Funded Projects.

### Assistant Data Scientist with Dr. Sharlee Climer (Aug 2015 – Dec 2016 • 1yr 5 mos)

- Finding Patterns from Alzheimer's Disease using the Gene Expression Data and Protein Level Data.
- Successfully Found 28 Important Gene Expressions out of 8500 that highly Influential to Alzheimer's Disease.

### Assistant Data Scientist with Dr. Wenjie He (Aug 2014 – Dec 2015 • 1yr 5 mos)

- Developing Automated Theorem Proving Web Platform Using A.I.

## SKILL

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### Language/Library:

- Python • R • Tensorflow/Keras • Spark • AWS • Google Cloud • BigQuery • BigTable

### Area of Expertise:

- Deep Learning • Ensemble Learning • Transfer Learning • Supervised / Unsupervised Machine Learning
- Evolutionary Computation • Bayesian Optimization • Data Mining / Munging / Visualization / Interpretation
- Quantitative Development / Research / Analysis • Statistical Modeling • Time series Forecasting
- Natural Language Processing • Artificial Intelligence • Linear / Dynamic Programming

## EDUCATION

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### M.S. in Computer Science

- Stock Price Prediction • Evolutionary Computation

University of Missouri-St. Louis

### B.S. in Computer Science

- Machine Learning • Data Mining • Artificial Intelligence

University of Missouri-St. Louis

## PROFESSIONAL DEVELOPMENT

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### Certificate / Specialization:

Professional Data Engineer

Data Science (10 mo.)

Machine Learning (5 mo.)

Data Science & Engineering with Spark (5 mo.)

Google

Johns Hopkins University

University of Washington

UC Berkeley

**Big Data** (6 mo.)  
**Data Science at Scale** (4 mo.)  
**Statistics with R** (6 mo.)  
**Data Analysis & Interpretation** (5 mo.)

UC San Diego  
University of Washington  
Duke University  
Wesleyan University

#### Publication:

Kyu S. Cho (2019). *Deep learning analysis of neurodevelopmental outcomes in children with perinatal HIV*  
Kyu S. Cho (2019). *Deep learning analysis of the frailty phenotype in older people living with HIV*  
Kyu S. Cho (2017). *Ensemble learning with feature selection for Alzheimer's disease prediction.*

#### ACHIEVEMENT

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##### Project and Research:

(Completed More than 120 Projects and Researches. Check out [www.qcho1010.com](http://www.qcho1010.com) for more details)

##### Finance & Business

- Stock Market Price Prediction • Money Ball and NBA Champion Prediction • Loan Repayment Rate Prediction
- Forecasting Interest Rate by the Fed. Reserve • Box Office Revenue Prediction • Insurance Rate Prediction

##### Automated System

- Next Word Auto-Completion Web App • Automatic Product Sentiment Analysis • Automatic Reviews in Medicine
- Song Recommender • Search Engine Simulator • Letter Recognition • Detecting Vandalism on Wikipedia

##### Medical & Health

- MRI Image Recognition for Finding Brain Tumor • Detecting Flu Epidemic via Search Engine Query Data
- Health Advisor A.I. • Analysis of Disease Control and Prevention • Exercise Manner Prediction

##### Public Benefit

- Potential Homelessness Prediction • Supreme Court Decision vs. ML Model • Potential Voter Prediction
- Potential Crime Area and Blight Status Prediction in Detroit • Potential Parole Violators Prediction

##### Award:

##### Hackedu at UMSL (1st Place)

- Bluetooth Location Tracker to Prevent the Future Loses

##### Global Hackathon 6 at SLU (Top 10)

- Analytic Platform for Future Homeless Prevention
- Efficient Resource Distribution and Management System

##### Arch hacks 3 at WSU

- Self-Motivated A.I. Health Care System

##### Golden Key International Honor Society

- For students with academic excellence & career goal

##### Dean's List

- For students with overall grade 80 and over

##### Public Presentation:

Building a Predictive Model for Time Series Data (2016)  
Developing Powerful Models (2016)  
NLP for Next Word Auto-Completion (2016)  
Apache Spark (2016)  
Mixture Models and EM (2016)  
Journey to Kaggle Competition (2016)  
Best Practice for Android Development (2015)