ERIC CHANG

ericchang.me/resume
ericchang2017@u.northwestern.edu
linkedin.com/in/ericcchang
github.com/ericchang00

experience

Groupon   Seattle, WA
Software Engineering Intern   Jun 17 - Sep 17
- Developed and deployed anomaly detection tool for web traffic data using time series modeling, reducing response time to data quality issues by 90% (Python, R Shiny, Docker)
- Build and test Spark (Scala API) ETL pipelines and regression models on TB-scale big data

Autodesk   San Francisco, CA
Data Scientist Intern   Jun 16 - Sep 16
- Worked on Autodesk Fusion 360. Created customer segmentation rules using unsupervised machine learning (kmeans, t-SNE), now used in analytics on 200K+ users
- Modeled user retention using a novel application of text mining methods (tf-idf) and provided recommendations to improve onboarding and customer stickiness

Northwestern University   Evanston, IL
Teaching Assistant   Jan 17 - Jun 17
- Teaching Assistant for Master's in Integrated Marketing Communications
- IMC 490: Machine Learning - taught R labs and introduced dplyr to curriculum
- IMC 498: Media Automation - taught lectures on Python for data science

Altec   St Joseph, MO
Manufacturing Engineering Co-op   Jun 15 - Dec 15
- Presented obsolescence risk analysis to approve $1.1m capital expenditure (R, ggplot2)
- Implemented largest single cost saving in manufacturing plant history - $147k annually on $260k of spend - by analyzing data to identify opportunities in material purchasing

skills

Languages: **Python, Scala, R, SQL, Bash**

Technologies: **Apache Spark (Scala), Git, Docker, AWS EC2**

Libraries: **Python** (pandas, numpy, scikit-learn, matplotlib, keras, tensorflow)
R (ggplot2, shiny, dplyr, tidyr, purrr)

projects & awards

Raspberry Pi Home Automation   github.com/ericchang00/RPi-Home-Automation
Designed light switches and locks as inexpensive (~$15) drop in replacements for Samsung SmartThings products. Wrote web server and RPi library in Python, designed 3D printed parts.

DeepPainting   github.com/ericchang00/DeepPainting
Applied Generative Adversarial Networks to perform style transfer on photos and videos with entire genres of art (Keras, Tensorflow). Wrote live demo using Flask.

1st Place, 2017 Master of Science in Analytics Deep Learning Poster Competition

1st Place, 2017 American Red Cross Hackathon

2nd Place, 2016 Allstate Event Prediction Challenge (Northwestern)

3rd Place, 2016 UChicago Econometrics Competition

education

Northwestern University   June 2018
B.S. **Statistics** and **Industrial Engineering**
GPA: **3.50/4.00**

activities

3D Printing for Everyone, Founder & President   Mar 16 - Present
Founded and lead Northwestern's first club dedicated to 3D Printing. Grew club to 14 members, secured $1,000 in funding, and held workshops at local middle schools to promote early engineering education for children in low-income situations.

Toastmasters International, Member   Mar 14 - Mar 16
Wrote and delivered speeches on a regular basis, building confidence with public speaking.