

ERIC CHANG

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education	Northwestern University B.S. Industrial Engineering GPA: 3.53/4.00	<i>June 2018</i>
experience	Classy Data Scientist Intern <ul style="list-style-type: none">Developed model pipeline to perform clustering and ranking of charitable organizations by similarity, for use in a recommender system. (xgboost, catboost, Gower Similarity, k-means)Implemented Gower Similarity from the original paper in numpy and optimized with a Cython extension for a 100x speedup.	<i>San Diego, CA</i> <i>Oct 17 - Dec 17</i>
	Groupon Software Engineering Intern <ul style="list-style-type: none">Built internal tool to monitor for abnormal web traffic using statistical anomaly detection; wrote frontend and backend. Identified 4+ issues weekly after deployment, improving data integrity.Wrote Spark jobs (Scala) to deduplicate website visitor data. Productionized time series model by parallelizing for a 60x speedup and tuning hyperparameters to reduce MAE from 10% to 4%.	<i>Seattle, WA</i> <i>Jun 17 - Sep 17</i>
	Autodesk Data Scientist Intern <ul style="list-style-type: none">Researched and implemented customer segmentation rules with k-means and hierarchical clustering, improving targeted marketing on 200K+ Autodesk Fusion 360 users.Built user retention model using a novel application of text mining methods (tf-idf) and logistic regression, working closely with nontechnical teams to improve customer stickiness.	<i>San Francisco, CA</i> <i>Jun 16 - Sep 16</i>
	Northwestern University Teaching Assistant <ul style="list-style-type: none">EECS 395: Systems Programming in Rust - teach Rust labs and introduce GitHub Classroom.IMC 490: Machine Learning - taught R labs and introduced dplyr/tidyr to curriculum.IMC 498: Media Automation - taught lectures on basic Python and Python for data science.	<i>Evanston, IL</i> <i>Jan 17 - Present</i>
open source & projects	scikit-learn (25,000★) Contributed <code>sklearn.preprocessing.PowerTransformer</code> : core implementation and usage guide (scikit-learn 0.20). Contributed various patches adding features and documentation. ggphysics (21★) Created demo of R and ggplot2 used to make physics animations - featured on Rweekly.org. icecream-rs Wrote Rust library that parses backtraces to extract useful information for debugging.	<i>github.com/scikit-learn/scikit-learn</i> <i>github.com/chang/ggphysics</i> <i>github.com/chang/icecream-rs</i>
skills	Languages: Python, R, SQL (Advanced) Scala, Rust, C++ (Proficient) Tools: Git, UNIX/Bash, Apache Spark, Docker, AWS EC2 Other: Certified SolidWorks Professional - Mechanical Design	
awards	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)	
activities	3D4E - 3D Printing for Everyone, Founder/President Founded and led Northwestern's first club dedicated to 3D Printing. Grew club to 14 members, secured \$1,000 in funding, and held workshops at local schools to promote engineering education. Toastmasters International, Member Wrote and delivered speeches on a regular basis, building confidence with public speaking.	<i>Mar 16 - Jan 18</i> <i>Mar 14 - Mar 16</i>