George Stoica

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EDUCATION

Carnegie Mellon University
Bachelor of Science in Statistics and Machine Learning

Aug 2015 - May 2019 | QPA: 3.68 (past 2 Years: 3.93)

University Honors | School of Computer Science College Honors | Dean's List with High Honors | Dean's List

CONFERENCE PAPERS

- George Stoica, Emmanouil Antonios Platanios, Barnabás Póczos, "Re-TACRED: Addressing Shortcomings of the TACRED Dataset", **Submitted to AAAI 2021**.

- George Stoica*, Otilia Stretcu*, Emmanouil Antonios Platanios*, Tom Mitchell, Barnabás Póczos, "Contextual Parameter Generation for Knowledge Graph Link Prediction", **AAAI 2020 (~20.6% Acceptance Rate)**.

WORKSHOP PAPERS

- George Stoica, Emmanouil Antonios Platanios, Barnabás Póczos, "Re-TACRED: A New Relation Extraction Dataset", **NeurIPS 2020 KR2ML Workshop**.

- George Stoica, Emmanouil Antonios Platanios, Barnabás Póczos, "Knowledge Graph Enhanced Relation Extraction", **NeurIPS 2020 KR2ML Workshop**.

- George Stoica*, Otilia Stretcu*, Emmanouil Antonios Platanios*, Tom Mitchell, Barnabás Póczos, "Contextual Parameter Generation for Knowledge Graph Link Prediction", **NeurIPS 2019 GRL Workshop**.

RESEARCH EXPERIENCE

Research Associate, **CMU Machine Learning Department,** Pittsburgh, PA (Aug 2019 - Present): Exploring multimodal task compositions via vector-module-networks. Building end-to-end video anomaly detection and natural language explanation models. Proposed a new relation extraction dataset for future benchmarking. Enhanced relation extraction model performance through cyclical ties to link prediction.

Honors Thesis, **CMU School of Computer Science,** Pittsburgh, PA (Mar 2018 - May 2019): Proposed a relation-dependent approach to knowledge graph link prediction. Method improves state-of-the-art by up to 5.1%, with training time gains of up to 28x. Advised by Machine Learning Department professors Barnabás Póczos and Tom Mitchell, and collaborated with PhD Candidates Anthony Platanios and Otilia Stretcu.

WORK EXPERIENCE

Machine Learning Researcher, **Inokyo,** San Francisco, CA (May 2019 - Aug 2019): Developed and demonstrated Inokyo's first end-to-end solution to item detection, tracking, and customer association for autonomous checkout in stores. Contributions under process of provisional patents. Lead research team.

Data Science Intern, **Palo Alto Networks (PAN),** Santa Clara, CA (May 2018 - Aug 2018): Applied several classification and statistical methodologies to improve PAN's sales representative churn prediction model. Implemented sampling extensions to several frequently used classifiers in industry to increase model performance on PAN's heavily skewed class data distributions.

Engineering Intern, **Conviva,** Foster City, CA (May 2017 - Jul 2017)**:** Utilized statistical methodologies and Apache Spark to analyze Conviva's large scale video streaming datasets (10s of billions of views), and designed several new production metrics aimed at improving customer insights on Conviva's products.

Data Science Intern, **Upwork,** Mountain View, CA (May 2016 - Jul 2016)**:** Designed a freelancer hire prediction model using Active Learning on Upwork's large freelancer marketplace datasets. Mitigated learning on very skewed data.

TEACHING EXPERIENCE

Teaching Assistant, **CMU Introduction to Machine Learning (PhD)**, Pittsburgh, PA (Jan 2018 - May 2018)**:** Prepared materials and assisted teaching the graduate course 10701: Introduction to Machine Learning (PhD). The course is a general introduction to machine learning methodologies. ~ 200 total students.

ACTIVITIES

President & Co-Founder, **CMU Data Science Club**, Pittsburgh, PA (Nov 2016 - Nov 2017)**:** Organized corporate talks, workshops and datathons for over 180 club members. Represented club and presided over all club meetings and university functions.

SKILLS

Python | Tensorflow | Pytorch |Apache Spark | Scikit Learn | Numpy | Pandas | R | Scala | C

FOREIGN LANGUAGES

Romanian (fluent) | French (beginner) | German (beginner)