

EDUCATION

- **North American University** Houston, TX
Bachelor of Science in Computer Science; GPA: 3.91 *Aug. 2015 – May. 2019*

EXPERIENCE

- **Pattern Analysis Lab - University of Houston** Houston, TX
Undergraduate Research Assistant *Jan 2017 - Present*
 - **Domain Adaptation & Active Learning:** Worked on two projects involving transferring model complexity across tasks using Active Learning techniques. Implemented the proposed algorithm in BroadScale Domain Adaptation and ran experiments comparing our proposed method to baseline models utilizing Active Learning techniques. Helped come up with and implement the entropy based complexity metric proposed which we use to predict the complexity of a given task based on entropy in k selected neighborhoods.
 - **Topological Data Analysis & Meta-Learning:** Currently working on understanding and linking meta-feature relationships to estimated prediction accuracy of models. Also working on meta-feature engineering using topological measures such as homology and manifolds via deep auto-encoders.
- **hackNAU 17** Houston, TX
Organizer *Oct 2017*
 - **Hackathon:** Organized a Major League Hacking partnered hackathon for college students in Texas at North American University. The event gathered over 300 registrants and 100 participants from various Texas cities. Commanded \$5,000 fund for event sponsorship/organization.
- **North American University** Houston, TX
Mentor *Jan 2016 - December 2017*
 - **Computer Science:** Mentored computer science students who were taking CS I, CS II, Data Structures, Algorithms and Operating Systems classes. Won outstanding mentor of the year awards twice in a row.

PUBLICATIONS

- **Domain Adaptation by Transferring Model-Complexity Priors Across Tasks:** R. Vilalta, K. D. Gupta, D. Boumber, M. M.Meskhi (2018). *Manuscript submitted for publication.*
- **BroadScale Domain Adaptation Using Adaptive Sampling and Active Learning:** R. Vilalta, D. Boumber, M. M.Meskhi (2018). *Manuscript submitted for publication.*

PROJECTS

- **Domain Adaptation Toolkit:** Combined and ported MATLAB code of various state-of-the-art domain adaptation algorithms including Bayesian Domain Adaptation algorithm that I worked on =into a single library that I am trying to merge into sklearn.
- **MLRP:** Created a resume parsing system that helped the user to understand what tech company they were best suited for. Won 1st place medal at HackHouston 2017.

PROGRAMMING SKILLS

- **Languages:** Python, R, MATLAB, C, SQL, Java **Technologies/Libs:** Scikit-Learn, GCP, TensorFlow, Git

REFERENCES

Available upon request.