

# Ben Lawson

b.enlawson.com | balawson@bu.edu | github.com/benlawson

## Education

- Boston University  
GPA: 3.8/4
- MS Computer Science**, specializing in **Data-Centric Computing** *May 2016 - January 2018*
- *Related Courses:* Intro to Data Science, Data Analytics, Data Mining, Advanced Databases, Data Mechanics, Intro to Databases, Computer Vision, Machine Learning
- Boston University  
GPA: 3.52/4
- BA in Computer Science, *cum laude* *September 2013 - January 2018*
- *Achievements:* 1<sup>st</sup>/42 and 5<sup>th</sup>/42 in Data Mining Kaggle In Class Competitions
  - Updated a template for Intro to Databases programming assignment in *Python* using *flask* and *MySQL*

## Experience

- Senior  
Quantitative  
Analyst
- WarnerMedia Applied Analytics**, *fka Legendary Applied Analytics*, Boston, MA *March 2018 - present*
- Contributing to and leading projects on image and video understanding and consumer audience insights.
  - Won internal hackathon with a prototype project that created a trailer from a feature length film.
  - Managing cloud resources, leading weekly coding workshops, and maintaining knowledge repository.
  - Developing tools using *Python* packages like *sklearn*, *pandas*, *keras*, *OpenCV*, *C++*, and *bash*
- Course  
Assistant
- CS 131 Combinatoric Structures**, Boston University, taught by John Byers & Babis Tsourakakis *Fall 2017*
- Hosted weekly office hours for students to answer questions on logic, proofs, and probability.
  - Assisted TA with discussion sections by guiding students through course problem-sets.
- Data Science  
Intern
- Legendary Entertainment, Applied Analytics**, Boston, MA *May - August 2017*
- Worked on projects focused on image and video understanding within the entertainment domain, including developing tools for word recognition within images and converting raw videos into vectors.
- Data Science  
Intern
- Adhark, Inc** (a 2017 MassChallenge Finalist), Boston, MA *January 2016 - August 2017*
- Translated market need to a machine learning framework then collected and cleaned related data.
  - Developed, documented, and tested machine learning based tools into social media task advisor using tools like *Word2Vec*, *gensim*, *sklearn*, *keras*, *nltk*, *pymongo*, and *pytest* in *Python*.
- Research  
Assistant
- Computer Science Dept. BU**, Boston, MA, advised by Evimaria Terzi *May 2015 - December 2016*
- Scraped, mined locality information from Twitter and Instagram to discover local hotspots in cities.
  - Other projects include monitoring Markov Chains with applications to traffic in cities.
- Computer  
Vision  
Intern
- Systems and Technology Research**, Woburn, MA *June - August 2015 and June - August 2016*
- Integrated an approximate nearest neighbor search algorithm into face recognition pipeline using *dlib* and *OpenCV* in *C++* to gain an speed up of a factor of 10. Automated evaluation with *bash* scripts.
  - Developed streaming functionality into face recognition technology and demonstrated capabilities in real-time on a security camera. Implemented using *Apache Spark* and *OpenCV* in *Python*.

## Projects

- contributions to  
*sklearn*
- scikit-learn/scikit-learn** *August 2017 - ongoing*
- Improved sampling methodology in iterative imputation model and wrote non-regression test
  - Discovered bug related to serialization of imputation model and fixed it with assistance from a maintainer
- project  
intercept
- OneWeek Hackathon 2017**, Microsoft HQ, Redmond, WA *July 2017*
- Invited as a guest at Microsoft's annual hackathon to work on a project aimed to disrupt sex trafficking.
  - Helped by improving the natural language processing solution currently in place.

## Publications

- Allerton 2018
- Predicting Positive and Negative Links with Noisy Queries: Theory & Practice.* Charalampos E. Tsourakakis, Michael Mitzenmacher, Kasper Green Larson, Jarosław Błasiok, **Ben Lawson**, Preetum Nakkira, and Vasileios Nakos.

## Technologies

- Primary  
Familiar
- Python: *pandas*, *numpy*, *sklearn*, *keras*, *matplotlib*, Jupyter Notebook, *flask*; *git*, *bash*,  $\text{\LaTeX}$ , Unix, AWS  
C++: *OpenCV*, *dlib*; Windows, MongoDB, MySQL *last updated: April 14, 2019*