JOE LEDGER

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EDUCATION

Case Western Reserve University (CWRU) *Cleveland, OH*

M.S. in Computer Science *Expected Graduation: Spring 2018*
Graduate GPA: 4.0
B.S. in Computer Science *Expected Graduation: Spring 2017*
Minor: Applied Data Science
Undergraduate GPA: 3.56

Bronx High School of Science *Graduated: Spring 2013*

WORK EXPERIENCE

CWRU Department of Computer Science Summers: 2015, 2016
Undergraduate Researcher *Cleveland, OH*

· Summer 2016: Worked on Indexed Personalized Page Rank
  · Accelerated Personalized Page Rank computations by using precomputed proximity vectors.
  · Results are promising: 50-100% speed increases for selected parameter settings.
  · Publication in draft stage.
· Summer 2015: Worked on the Cell Line Classification Project
  · Used machine learning algorithms (Support Vector Machines and Decision Trees) to classify cell lines by their reaction to the cancer drug SMAPs using gene expression and IC50 data.
  · Presented results at the 2015 CWRU Data Science Symposium and 2016 Research ShowCase.

CWRU Office of Sustainability Spring 2016 (Part Time)
Green Lab Auditor *Cleveland, OH*

· Developed a desktop application that creates customizable visualizations from energy sensor data.
· Application is used by lab auditors who write reports on how behavior changes could save energy.

BldgScout Summer 2016 (Part Time)
Backend Development Intern *Cleveland, OH*

· Fixed security issue with existing UnVolt Engine involving the processing of user passwords.
· Prototyped new version of UnVolt Engine using Java Spring Boot.
· Designed and implemented scalability and correctness tests for all API endpoints.

RELEVANT COURSEWORK

Data Mining	**Database Systems**
High Performance Scientific Computing	Computer Networks
Machine Learning	Algorithms
Software Engineering	Software Craftsmanship

*Courses in **bold** were taken at the graduate level.

TECHNICAL SKILLS

· Highly Proficient with programming languages Java and Python.
· Proficient with SQL.

- Some experience with C, C#, Scheme.
- Experience with data science tools Pandas, Scikit-learn, SciPy, and NumPy.
- Experienced with Git, Linux Command Line, LaTeX.
- Experience with Cross-Platform Desktop Application Development with Qt.
- Experience with REST API development with Java Spring Boot.

HONORS AND AWARDS

· University Merit Scholarship	August 2013 - Present
· Alumni Association Outstanding Junior/Senior Scholarship	Spring 2016 - Present
· Dean's High Honor Roll	Spring 2014, Fall 2014
· Dean's Honor Roll	Spring 2015, Fall 2015, Spring 2016
· Varsity Athlete (Cross-Country, Track & Field) for CWRU	August 2013 - Present
· 4x UAA All-Academic Team	Spring 2014 - Present