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 (PPR) computations by using precomputed proximity vectors.
  - Results are promising: 50-100% speed increases for selected parameter settings.
- 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