Shane Deiley

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OBJECTIVE

Problem solver and lifelong learner looking for data analytics and software engineering opportunities to expand skill set and solve difficult problems with data-driven solutions. Aspire to one day participate in a data analytics-focused role.

EDUCATION

Washington University in Saint Louis, St. Louis, Missouri, USA
Bachelor of Science Candidate in Computer Science   Aug 2012 – (Exp. Grad.) May 2016
Second Major in Mathematics (Prob/Stats Focus)
- Cumulative GPA: 3.7 / 4.0
- Deans List: Fall 2012, Fall 2013, Spring 2014

Relevant Coursework
Artificial Intelligence and Machine Learning, Data Mining, Algorithms and Data Structures, Object-oriented Programming, Probability and Statistics, Statistical Modeling and more

WORK EXPERIENCE

Microsoft Corporation, Seattle, Washington, USA
Software Development Engineering Intern, MPSIT   May 2015 – Aug 2015
- Project: Data Pipeline Design/Construction and Anomaly Alerting
- Supervisor: Kevin McClintock
- Description: Utilized various Azure technologies (Sql, Blob Storage, ServiceBus Queue, Cloud Services, Anomaly Detection) to implement a data pipeline for anomaly detection alerting on product signing data.
- Responsibilities: Create SSIS for ETL process, structure a series of cloud services to retrieve, format, and send data to an anomaly detection api, parse the results, and alert anomalous data.

RESEARCH EXPERIENCE

Washington University Computer Science Research Experience for Undergraduates
Undergraduate Research Student, Computer Science Department   May 2014 – Dec 2014
- Project: Parallel Data Structures
- Supervisor: Dr. Kunal Agrawal and Partner: Alex Jones, USC
- Description: Implemented and augmented an order-maintenance data structure supporting $O(1)$ time queries and $O(1)$ amortized time inserts to be utilized in parallel applications for race-condition detection. Early results indicate mere constant slowdown when on-the-fly race detection is enabled.

TECHNICAL PROJECTS

Bagged and Boosted Decision Trees, *Matlab*
- Implemented an ID3 decision tree and utilized it in random forest and boosted tree implementations
- Achieved an classification accuracy of 88% beating the professor's implementation

Game Development, *C++*
- Designed a multi-functional game for the command line enabling users to play full implementations of Reversi, Nine Almonds, or Magic Square

Topic Modeling for Classification, *Python & NumPy*
- Compared implementations of latent Dirichlet allocation (LDA) and non-negative matrix factorization (NMF) in text topic modeling qualitatively
- Analyzed the performance of a classifier using the topics as the label space

Deep Learning - Artificial Neural Networks, *Matlab*
- Created an artificial neural network for binary classification
- Utilized classic forward and backward propagation (gradient descent) algorithms for training

TECHNICAL SKILLS

Programming Languages and Software
- TeX, LaTeX, Matlab, Mathematica, R, Python, Java, C/C#/C++, .NET, Cilk, Web Development, MySQL, T-SQL, Sql Server, Azure Sql, Azure Storage, Azure ML, Azure Cloud Services, and Visual Studio,

Communication
- Extensive experience w/ Technical Writing and pair-programming; Excellent at public speaking and sales

AWARDS & HONORS

Yahoo! Case Competition Finalist   Nov 2012
- Chosen to present in class-wide case competition to freshman class and Google, Inc. representatives
- Proposed advertising solutions and design changes for Yahoo, Inc. utilizing user data

To Write Love on Her Arms Panelist   Nov 2014
- Selected by Washington University campus organization T.W.L.O.H.A. to represent the student perspective on a panel about suicide and mental health on campus
- Spoke to a large audience alongside a licensed psychiatrist, a professor of anthropology, and a professor of psychology

| **COMMUNITY SERVICE** | **Mission St. Louis**, Job and Leadership Training Program | May 2014 – Sep 2014 |

COMMUNITY SERVICE

Mission St. Louis, Job and Leadership Training Program   May 2014 – Sep 2014
Mentor
- Guided two formerly convicted males through the process of getting their driver's license
- Encouraged them as they set monthly goals and aided them to achieve them
- Supported them through difficult times like finding a job and enduring emotional stress

Computer Science Tutor, CSE 502N   Jan 2015 – May 2015
Tutor and Teaching Assistant
- Helped struggling students with C++ programming assignments and data structure and algorithm theory
- Tutored students that needed extra help outside of my normal TA responsibilities

ACTIVITIES

Residential Adviser, Washington University Residential Life   Aug 2014 – Current
Freshman RA
- Trained to create and foster a community that champions diversity and inclusion.
- Mentored 44 freshman academically and experientially by living with them and supporting them through various academic and emotional difficulties.

Cru, Christian Campus Group   Aug 2012 – Current
Director of Discipleship
- Led a bible study in an attempt to create community amongst Christians in my dorm.
- Met with other leaders in Cru to encourage them to be more proactive to underclassman, and responded to concerns about fostering new relationships.

Strongman   Oct 2015 – Current
Recreational Strength Athlete
- Compete locally in strongman competitions in which barbaric strength events result in points.
- The competitor with the most points wins.