Christopher Spencer Buja

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Skills

- Knowledge of theory and practice of applying machine learning, artificial intelligence, and statistical methods
- Software development in Python (Advanced), JavaScript (Advanced) , C++ (proficient), and R (proficient)

Education

University of Michigan Ann Arbor, MI | April 2016

Bachelor's Computer Science - Engineering
Computer Science GPA: 3.526/4.0, Leadership Board Member of Artificial Intelligence Club called MSAIL
Senior Project: Pitstop Pal, iPhone app with proprietary recommender system.

Relevant Coursework

Probabilistic Graphical Models - Representation, Introduction to Machine Learning, Introduction to Artificial Intelligence, Web Databases and Information Systems, Data Science for Medicine, Higher Theory of Statistics, Bayesian Statistics, Linear Algebra

Work Experience

Program Manager, **Microsoft** Seattle, WA | Summer 2016 - Current

- Plans and carries out statistical analyses, visualizations, data engineering, and machine learning for Windows 10 Engineering Systems team (ES) in Windows and Devices Group (WDG) to understand developer productivity at Microsoft, collaborating with WDG Data Science.
- Applied probabilistic graphical models to predict runtimes of systems within WDG. Implemented and open sourced continuous variable elimination algorithm in pgmpy library.
- Designed and implemented machine learning with Microsoft Research team. Developed Python implementation of Counting Grids model and will apply it to Windows 10 feedback data. Scales to design matrix of 20k examples by 6k features, required for our domain and forcing careful algorithm design decisions.

Undergraduate Machine Learning Research Assistant, **University of Michigan** Ann Arbor, MI | Summer 2016

- Built model with combined approach of convolutional neural networks and conditional random fields to segment images of human cuts and wounds with 97.9% accuracy, a statistically significant improvement compared to state of the art methods.
- Built phone app in React Native to take photos and segment images of wounds, using model above.

Introduction to Artificial Intelligence Grader, **University of Michigan** Ann Arbor, MI | Winter 2016

- Graded assignments for this upper level course, solidifying my own understanding of AI topics, including search, constraint satisfaction, planning, uncertainty and probability, and machine learning.

Program Management Intern, **Microsoft** Seattle, WA | Summer 2015

- Implemented dashboards and models for ES team in WDG using AngularJS, and C# to detect outliers in infrastructural data sets.

Data Science and Web Development Intern, **12 Labs** San Francisco, CA | Winter 2015

- Built product that identifies the most effective social media campaigns of businesses, using topic modeling.

Software Engineering Intern, **Salesforce** San Francisco, CA | Summer 2014

- Implemented internal graphing library, using D3.js, for almost real-time data stream built upon set of Apache Storm topologies. Front-end system used Backbone and React.

Front-End Development Intern, **Full Circle CRM** San Mateo, CA | Summer 2013

- Wrote entire front-end for Easy Campaign Member Status. Rated 5/5 Stars.