Tomas McCandless

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EDUCATION

Master of Science, Computer Science
Bachelor of Science, Computer Science
Bachelor of Arts, Philosophy
University of Texas at Austin (expected May 2014)
GPA: 3.67 CS GPA: 3.73

TECHNICAL SKILLS

Fluent: Java, Matlab, C, Python, Linux/Unix, git
Familiar: C++, Ruby, LISP, Haskell, Prolog, LaTeX, HBase, gwt, JavaCC, libsvm

SELECTED PAPERS

Object-Centric Spatio-Temporal Pyramids for Egocentric Activity Recognition

- British Machine Vision Conference, 2013 (poster)
- Multi-resolution histograms of detected objects used as feature vectors
- Boosting and SVMs for classification of first-person video

Linear vs. Hierarchical Segmentation of Egocentric Video

- Partition hours of first-person video into events
- k-means clustering with temporal constraints (tck-means)
- Histogram intersection using pixel intensities as features
- Prototype UI for fast video browsing based on linear or hierarchical segmentation

EXPERIENCE

Software Engineering Intern Summers 2012-2013
Workday, Performance Engineering, Pleasanton, CA

- Conducted performance evaluation of backend technologies for new products.
- Researched performance effects of running our application on different backend environments.
- Researched and deployed a distributed, scalable system for collecting and visualizing performance metrics.
- Over 500 different metrics collected from MySQL, Linux kernel, etc.
- Developed a webapp using gwt for downloading collected data.

Research Assistant Spring 2013
Computational Visualization Center, University of Texas at Austin

- TexMol, a software package used for computational drug discovery.
- Developed a method for scoring strength of molecular bonds.
- UI design and implementation using qt4.

Undergraduate Assistant 2010-2011
Department of Computer Science, University of Texas at Austin

- Graded exams, assisted students in Algorithms and Data Structures with designing and debugging Java programs.

SELECTED COURSEWORK

Graduate:
Parallel Algorithms, Machine Learning, Programming Languages, Formal Semantics
Undergraduate:
Computer Vision, Information Retrieval, Operating Systems, Algorithms, Artificial Intelligence, Computer Graphics, Computational Linguistics, Programming for Correctness, Probability, Number Theory