

## Kirk Jackson

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EDUCATION	<p><b>Tufts University</b>   Medford, MA</p> <p>Bachelor of Science in Computer Science, expected May 2015</p> <p>GPA: 3.80, Dean's List</p>
RELEVANT COURSES	<p>Visualization, Algorithms, Web Programming, Data Structures, Computation Theory</p> <p>Machine Structure &amp; Assembly Language, Programming Languages, Calculus</p> <p>Discrete Math, Statistics, Linguistics, Geological Applications of GIS</p>
PROJECTS	<p><u>Lossy Image Compressor &amp; Decompressor</u></p> <ul style="list-style-type: none"><li>Utilized modular interfaces to pack 2x2 rgb pixel blocks into 32-bit words</li><li>Compresses images to 1/3 of original size, losing 1.5 – 2.5% of image data</li></ul> <p><u>Image Rotation</u></p> <ul style="list-style-type: none"><li>Designed an interface for polymorphic 2D unboxed blocked arrays in C</li><li>Implemented an image rotation program that optimizes runtime by using this blocked interface to increase spatial locality within caches</li></ul> <p><u>Interactive Processing Visualizations</u></p> <ul style="list-style-type: none"><li>Implemented Force Directed Graph, Squarified Treemap, NodeTrix, Heatmap, Coordinated-Multi-View System, Bar Chart, Line Graph, and Pie Chart with animated transitions</li></ul> <p><u>GIS Spatial Analysis</u></p> <ul style="list-style-type: none"><li>Developed least-cost siting models for desalination projects in Southern California using weighted raster analysis</li></ul>
EXPERIENCE	<p><b>Malden MAKERspace</b>   Malden, MA</p> <p><i>Tufts MAKER Education Fellow</i>   September 2014 – present</p> <ul style="list-style-type: none"><li>Taught 3D printing and lego robotics to high school students</li></ul> <p><b>Nokia HERE Maps</b>   Cambridge, MA</p> <p><i>Intern</i>   May – August, 2014</p> <ul style="list-style-type: none"><li>Integrated Yelp sourced content to enrich HERE mapping platform</li></ul> <p><b>Apogee Adventures</b>   Brunswick, ME</p> <p><i>Trip Leader</i>   May – August, 2013</p> <ul style="list-style-type: none"><li>Coordinated trip logistics, meals, and group dynamics while leading multi-week biking trips for teenagers in Vermont and Quebec</li></ul> <p><b>Tufts Development Technology Lab</b>   Medford, MA</p> <p><i>Workshop Developer &amp; Teacher</i>   January – May, 2012</p> <ul style="list-style-type: none"><li>Developed and taught early-education robotics and engineering curriculum</li></ul>
SKILLS	<p>Software   ArcGIS, AutoCAD, Autodesk Inventor, LEGO Mindstorms, MS Office</p> <p>Programming Languages   C, C++, Processing, HTML, Javascript, CSS, JQuery, SQL</p> <p>Languages   Spanish - fluent, Mandarin – conversational</p>
ACTIVITIES	<p><b>Tufts Teen Outdoor Program</b>   <i>Co-founder</i></p> <ul style="list-style-type: none"><li>Coordinated grant money to implement weekly outdoor program for teens</li></ul> <p><b>Tufts Ears for Peers</b>   <i>Coordinator</i></p> <ul style="list-style-type: none"><li>Managed student counseling and support hotline</li></ul> <p><b>Tufts Wilderness Orientation</b>   <i>Trip Leader</i></p> <p><b>Teach-in CORES</b>   <i>ESL Teacher</i></p>