Kirk Jackson

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EDUCATION Tufts University | Medford, MA

Bachelor of Science in Computer Science, expected May 2015

GPA: 3.80, Dean's List

RELEVANT COURSES Visualization, Algorithms, Web Programming, Data Structures, Computation Theory Machine Structure & Assembly Language, Programming Languages, Calculus Discrete Math, Statistics, Linguistics, Geological Applications of GIS

PROJECTS

Lossy Image Compressor & Decompressor

- Utilized modular interfaces to pack 2x2 rgb pixel blocks into 32-bit words
- Compresses images to 1/3 of original size, losing 1.5-2.5% of image data Image Rotation
 - Designed an interface for polymorphic 2D unboxed blocked arrays in C
 - Implemented an image rotation program that optimizes runtime by using this blocked interface to increase spatial locality within caches

Interactive Processing Visualizations

 Implemented Force Directed Graph, Squarified Treemap, NodeTrix, Heatmap, Coordinated-Multi-View System, Bar Chart, Line Graph, and Pie Chart with animated transitions

GIS Spatial Analysis

 Developed least-cost siting models for desalination projects in Southern California using weighted raster analysis

EXPERIENCE

Malden MAKERspace | Malden, MA

Tufts MAKER Education Fellow | September 2014 – present

Taught 3D printing and lego robotics to high school students

Nokia HERE Maps | Cambridge, MA

Intern | May – August, 2014

Integrated Yelp sourced content to enrich HERE mapping platform

Apogee Adventures | Brunswick, ME

Trip Leader | May – August, 2013

 Coordinated trip logistics, meals, and group dynamics while leading multiweek biking trips for teenagers in Vermont and Quebec

Tufts Development Technology Lab | Medford, MA

Workshop Developer & Teacher | January - May, 2012

Developed and taught early-education robotics and engineering curriculum

SKILLS

Software | ArcGIS, AutoCAD, Autodesk Inventor, LEGO Mindstorms, MS Office Programming Languages | C, C++, Processing, HTML, Javascript, CSS, JQuery, SQL Languages | Spanish - fluent, Mandarin – conversational

ACTIVITIES

Tufts Teen Outdoor Program | Co-founder

· Coordinated grant money to implement weekly outdoor program for teens

Tufts Ears for Peers | *Coordinator*

Managed student counseling and support hotline

Tufts Wilderness Orientation | *Trip Leader*

Teach-in CORES | ESL Teacher