

Joshua Holbrook

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Skills and Qualifications:

- Expert in server-side JavaScript (node.js); Knows JavaScript, python & bash; Experience with R, MATLAB & LabVIEW
- Fluent in HTML and Markdown; Experience with L^AT_EX
- Competent with couchdb and mongodb; Experience with redis, leveldb, rabbitmq and solr
- Experience with writing, serving and consuming HTTP RESTful and non-RESTful, JSON and/or XML APIs
- Theoretical and practical experience with numerical methods focusing on multivariate nonlinear optimization and boundary value problems
- Proficient with Microsoft Office suite and vim; Experience with COMSOL Multiphysics 3.5 and emacs
- Experience in engineering/laboratory measurements and instrumentation hardware
- Certified EIT; Comprehensive understanding of mechanical engineering principles
- Ability to lift and carry up to 30 lbs

Education:

Master of Science in Mechanical Engineering *Sept. 2009 – May. 2011*
University of Alaska Fairbanks
Thesis: The Determination of Anisotropic Thermal Conductivity with Thermal Needle Probe Measurement
3.62 GPA

Bachelor of Science in Mechanical Engineering, Cum Laude *Aug. 2005 – May 2010*
University of Alaska Fairbanks
Minor in Mathematics 3.67 GPA

High School Diploma *May 2005*
Susitna Valley Jr/Sr High School
3.73 GPA

Projects:

The Determination of Anisotropic Thermal Conductivity with Thermal Needle Probe Measurements *May 2010 – May 2011*

- Masters Thesis
- Numerical component involving 3-D modeling with comsol and matlab to simulate thermal needle probe measurements
- Lab measurement component involving engineered anisotropic materials

Counting of Stream Crossings Along a Path Between Two Given Alaskan Villages *March 2010 – May 2010*

- Used python and qgis
- First experience with ESRI shapefiles and GIS in general
- Part of a feasibility study on laying unburied fiber optic cable over tundra in remote regions of Alaska

Service:

American Society of Mechanical Engineers, Student Chapter *September 2009 – May 2010*

- Administered web site and facebook page
- Volunteered at E-Week activities

Awards & Grants:

Center for Global Change Student Research Grant

May 2010

- Project title: "Determining Anisotropic Thermal Conductivity of Snow with Needle Probe Measurements"
- Awarded \$8200

3rd Place, 2010 Campus Research Day Undergraduate Symposium

April 9th, 2010

- Project title: "Development and Benchmarking of Optical Touchscreen User Interface Technology"
- Awarded \$1000

Undergraduate Research Grant

October 2009

- Project title: "Development and Benchmarking of Optical Touchscreen User Interface Technology"
- Awarded \$2250

Employment History:

Software Developer

February 2014 - Present

Condé Nast Technology, Manhattan NY

Job duties include:

- Developing API services for content management and publishing with node.js, mongodb and solr
- Deploying and supporting API services

Software Engineer

August 2013 – November 2013

i.TV LLC, Provo UT

Job duties include:

- Developing back-end systems with coffeescript, mongodb and rabbitmq
- Building internal content creation/management tools with coffeescript and angular.js
- Deployment of internal services

Head of Support

June 2012 – December 2012

Nodejitsu Inc., San Francisco CA

Job duties include:

- Managing and training junior support engineers
- Monitoring IRC, email, twitter and other sources for support requests
- Triaging and investigating issues with Nodejitsu software, servers and cloud providers
- Maintaining, bugfixing and managing releases for the Flatiron framework and Nodejitsu's open-source software
- Developing and maintaining internal support infrastructure and tooling

Support Engineer

July 2011 – May 2012

Nodejitsu Inc., San Francisco CA

Job duties include:

- Monitoring IRC and email for support requests
- Triaging and investigating issues with Nodejitsu software
- Implementing sendgrid-based email system for Nodejitsu master API
- Writing bugfixes, adding features and documenting Nodejitsu's open source libraries and software

Teaching Assistant

September 2010 – May 2011

UAF Mechanical Engineering Department, Fairbanks AK

Job duties include:

- Grading homework and designing quizzes for ES 346, Basic Thermodynamics
- Grading homework for ME/ENVE 458/658, Energy and the Environment
- Grading homework for ME 403, Machine Design
- Redesigning and conducting laboratory experiments for ME 415, Thermal Systems Lab

Research Assistant

January 2010 – August 2010

UAF Institute of Northern Engineering, Fairbanks AK

Job duties include:

- Designing and running finite element models using COMSOL and MATLAB
- Analyzing geographical information using perl, python, MATLAB and C++

Office Assistant

January 2008 – December 2009

UAF Mechanical Engineering Department, Fairbanks AK

Job duties include:

- Tracking purchase information on UAF's Oracle database and compiling it into a human-readable form
- Facilitating communication between students, faculty and system administration

Homework Grader

September 2008 – December 2008

UAF Mechanical Engineering Department, Fairbanks AK

Job duties include:

- Grading and correcting homework assignments for ES 331, "Mechanics of Materials"

Painter

May 2008 – August 2008

UAF Conference Services, Fairbanks AK

Job duties include:

- Patching, painting and wet-sanding walls, ceilings, doors and trim

Construction Laborer

May 2007 – June 2007

Panco Construction, Talkeetna AK

Job duties include:

- Sanding, polishing and assisting in the fabrication of solid surface
- Stocking, staging and assisting in the install of countertops other materials

Laboratory Assistant

February 2007 – May 2007

UAF Water and Environmental Research Center, Fairbanks AK

Job duties include:

- Taking inventory of chemical stock
- Tabulating, manipulating and organizing test data in Excel

Porter

May 2006 – August 2006

Aramark-Harrison Lodging, Denali National Park AK

Job duties include:

- Stocking; cleaning and maintaining public areas; and preparing rooms for guest arrival