MAXWELL CIOTTI

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EDUCATION

University of Houston   Jun 2015–May 2018 (expected)
Bachelor of Science in Computer Science & minor in Mathematics

RESEARCH

Interests: visualization, physics simulation, analytics, graphics, unsupervised learning

Pathline Placement & Visualization of Vector Fields   Mar 2016–
Undergraduate research with Dr. Guoning Chen

WORK EXPERIENCE

University of Houston: DASH   Aug 2015–
Application developer, research programmer (data analytics), IT support

- Maintained a form building application for a community health management system
- Created web application to view and modify a variety of environmental sensor data
- Increased atmospheric sensor data editing efficiency by roughly 300%
- Technologies: Node.js, Meteor, MongoDB, Angular, Ionic

Florida Institute of Technology ERC   Jan 2014–May 2014
Application developer

- Created and maintained a system to log EPA inspections
- Developed a REST API and server-side utilities for managing and viewing reports
- Technologies: Node.js, Keystone, MongoDB, Mongoose

ACTIVITIES & INVOLVEMENT

Leadership

- Officer of IEEE NSM (historian)
- Officer of CougarCS (designer)
- Co-organizer of Humans of UH

Community Involvement

- Metropolitan Volunteer Program
- Non-Music Major Orchestra

INDEPENDENT PROGRAMMING & DESIGN EXPERIENCE

See an index of my projects and experiments at http://mdc.io

EvntQ   Nov 2015
http://www.evntq.com
Web application, allows guests to act as a collaborative DJ at an event

- Technologies: Meteor, MongoDB, JavaScript, Spotify API
- Created in less than 48 hours for the UH CodeRED Hackathon

QuickHAC   Dec 2012
http://www.quickhac.com
Chrome extension and iOS/Android application, automatically checks student grades and provides students with a more accessible interface to view their academic progress

- Technologies: Ruby, HTML, CSS, JavaScript, TypeScript
- 5,000 users at peak usage

SKILLS & ABILITIES

Programming Languages & Libraries

- JavaScript: > 25,000 lines of code written
- CSS: > 14,000 lines of code written
- Java: > 9,600 lines of code written
- C++: > 4,000 lines of code written
- Lua, C, Python, Swift, PHP, Fortran, Make, Ruby, Bash, Batch Script, R
- Graphics: OpenGL, WebGL
- Web: Node.js, Express, Meteor, jQuery, Underscore, Backbone, Angular, React, Jekyll

Computer Software

- UNIX command line and compiling software
- Git version control system
- Writing documentation and specifications
- LaTeX document typesetting
- Adobe Photoshop, Adobe Illustrator, Sketch
- AutoDesk Inventor, Creo Parametric
- MATLAB, Mathematica

Updated 21 April 2016