W. Chad McKee, Ph.D.

Atlanta, GA | 706-992-9562 | chadm_@yahoo.com
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Summary

Web Developer and Software Engineer with 5+ years of programming experience seeking an intensive development position in the greater Atlanta area. Excellent data analysis, algorithm design, project management, mathematics, and technical and non-technical communication skills. Experienced in Linux system administration, database management, and high-performance computing.

Experience

DigitalCrafts | Full-Stack Web Developer   April 2017 – August 2017

Atlanta, GA
- 16-week intensive, full-time accelerated web development program
- Learned full-stack JavaScript, including jQuery, Node.js, SQL, Express, React, HTML/CSS, and Amazon Web Services
- Recent projects include:

Switch Inventory Tracker | github.com/chadm9/Switch-Inventory-Tracker   July 2017

- Web application for alerting users of newly available Nintendo Switch inventory at major online retailers
- Built with HTML, CSS, React, Node.js, Express, MySQL, PhantomJS, and CasperJS
- Inventory status determined via web scraping with PhantomJS and CasperJS

Game On | gameon.wchadmckee.com | github.com/chadm9/Game-On   June 2017

- Full-stack web application for visualizing and comparing NBA basketball player statistics
- Built with Pug, HTML, CSS, jQuery, MySQL, Node.js, and Express
- Features free user accounts for following news, stats, and tweets of favorite players

Connect-4 | wchadmckee.com/Connect-4 | github.com/chadm9/Connect-4   May 2017

- The classic board game where players attempt to connect four tokens in a row to win
- Built with JavaScript, jQuery, HTML, and CSS
- Game engine implemented via application of the Minimax Algorithm with alpha-beta pruning

Filet Minion | github.com/chadm9/Filet-Minion   April 2017

- A 2D third person shooter game featuring the creatures from the "Despicable Me" film franchise
- Built with Python and Pygame

Louisiana State University | Postdoctoral Computational Materials Science Researcher   February 2014 – March 2017

Baton Rouge, Louisiana
- Performed Materials Science computer simulations in Linux-based high-performance computing environments
- Designed and implemented Python algorithms for locating the structures of novel chemical and material systems
- Published eight peer-reviewed scientific articles based on Computational Materials Science research
- Mentored graduate students in Materials Science research and Linux-based high-performance computing best practices
- Attended scientific conferences nationwide and lectured on research findings
- Programming research projects included:

RASS | (under peer review)   December 2016

- The most efficient stochastic search algorithm for locating molecular structures
- Built with Python
- Requires the fewest number of input parameters possible and is totally automated

Kick-R | github.com/chadm9/Kick-R   June 2016

- An enhanced molecular structure generator for finding novel compounds
- Built with Python

- Employs filtering based on Graph Theory to maximize the quality of generated structures

University of Georgia | Computational Chemistry Research Assistant   August 2008 - December 2013
Athens, Georgia
▪ Performed Chemistry computer simulations related to petroleum research on Linux-based computing clusters
▪ Authored Java and Python scripts for automating the computation of chemical properties
▪ Served as the system administrator for a Linux-based computing cluster
▪ Published eight peer-reviewed scientific articles based on Computational Chemistry research
▪ Contributed to and maintained a chemical structural database

Education

University of Georgia | Ph.D., Computational Chemistry   December 2013
Athens, GA

University of Georgia | B.S., Chemistry   May 2006
Athens, GA