Resume – Chad Hokama

Personal Information

Chad Hokama
XX XXXX XXXXXXX XX
XXXX XXXX, XX XXXXX
USA
tel: XXX.XXX.XXXX
alpha@ChadHokama.com
www.ChadHokama.com

I am a creative and experienced research engineer with a passion for implementing mathematical solutions in code and telling amazing stories with data. I am seeking opportunities in **data mining**, **data visualization**, **algorithm engineering**, and **scientific software development**.

Education

M.S. University of Utah (2011-2013). Thesis advisors: Alla Borisyuk. Thesis Domain: Computational Neuroscience. Coursework Focus: Computational Modeling, Scientific Computing, Data Science.

Post-Baccalaureate Studies (2008-2010). 53 credit hrs of Part-time enrollment to complete pre-requisites for graduate level study in Computer Science. Please consult the Coursework section for details.

B.A. Brigham Young University (2000-2005).

Experience

2011 → Present *Graduate Research Assistant*, University of Utah
Develop computational models involving dynamical systems, Markov processes, phase plane analysis and generalized linear models, for use in neuroscience research. Model and analyze complex data sets from experimental research. Develop and maintain code for calculation and simulation of mathematical models primarily in MATLAB, Python and R programming languages. Scale codes and execute simulations on massively parallel cluster using C/C++ MPI, openMP, PBS and Bash scripting. Create useful visualization tools for analysis, publication and presentation using Processing, VTK (visualization toolkit), MATLAB, R, and Python packages.

2010 → 2011 *Research & Development Engineering Consultant*, Ragula Systems
Developed and designed new products to meet strategic goals within this R&D holding firm. Research activities included calculation and material simulation using application written in MATLAB,Simulink and Excel, drafting (CAD,SolidWorks), geometrical dimensioning and tolerancing for manufacturing, prototype, testing/validation, value engineering, client presentation.

2007 → 2009 *Prototype Engineering Specialist*, WET Design
As part of a Product Development and Engineering Team: designed, revised and implemented functional mechanical prototypes. Worked on many critical mechanical components found in some of the most distinct architectural features in the world including the Fountains at Bellagio in Las Vegas Nevada, Kalifa Tower in Dubai, UAE and the Living Ice Sculptures at City Center Las Vegas.

Technical Summary

C/C++, Java, openMP, MPI, Matlab, R, Python (numpy,scipy,scikit-learn,nltk), Regular Expression, SQL, Hadoop, Processing, d3(.js), Visualization Tool Kit

(VTK), Tableau, Excel, LaTeX, HTML, CSS, Adobe CS, Eclipse, Emacs, Vim, Agile Process (Scrum and XP), git, svn.

COURSEWORK

Advanced: Numerical Analysis, Mathematical Modeling, Mathematical Biology, Computational Neuroscience, Computational Physics, High Performance Computing, Data Mining, Data Visualization.

Post-Bacc: Full undergraduate Math, Physics, and Chemistry series. CS core, including: Object Oriented Programming, Data Structures and Algorithms and Software Engineering.