

# RAMPRASAD VENKATARAMAN

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## *Summary*

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- › 1.5+ years full-time in computational software development, testing, optimization
- › 4+ years of numerical methods and high performance computing for research software
- › Experience leading refactoring efforts to overhaul & redesign computational programs without downtime
- › Excellence at collaborating in a multi-disciplinary environment to create specs, understand underlying principles, develop testing scenarios etc.
- › Zeal to continue learning, to master new skill-sets and eagerness to meet challenges in workplace

## *Domain skills*

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| › Numerical methods, Matrix computations     | › Software redesign: Procedural to object-based to object-oriented refactorings |
| › Pattern-based, Object-Oriented code design | › DSMC, Boltzmann methods, kinetic theory                                       |
| › Scripting, Piping & coupling programs      |   |
| › Parallelization, parallel programming      |   |

## *Computer Skills*

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|------------------------|--|
| › Development          | C++, C, Fortran (90 / 77), Java                |
| › Scripting            | Unix Shell                                     |
| › Parallel Programming | MPI  |
| › Web Development      | XHTML, CSS, PHP, JavaScript, Dreamweaver       |
| › Version Control      | Subversion, CVS                                |
| › Unit Testing         | Boost::Test, Junit                             |
| › Build Tools          | Make, Cmake, Ant                               |
| › Environments         | Windows, Linux, cygwin, minGW / MSYS, PBS, SGE |
| › Tools                | Eclipse, Doxygen, JIRA, Bugzilla, Confluence   |

## *Summary of experience*

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**July 06 – Present:**

Programmer / Analyst,  
Section on Statistical Genetics,  
Dept. of Biostatistics, Univ. Alabama at Birmingham

**Aug 03 – June 06:**

Graduate Fellow / Assistant,  
Dept. of Mechanical Engineering  
Univ. Alabama at Birmingham

## *Education*

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**M.S Mechanical Engineering** - The University of Alabama at Birmingham (~ May 2008)

Current GPA: 3.7, Advisor: Dr. Gary Cheng

**B.Tech Mechanical Engineering** - Pondicherry University, India (July 2003)

Top 3% in the university