Muhong Zhou

- Bachelor's degree in Math and Applied Math from Zhejiang University, 2011

- Previous Course/Research Projects:
- **Calculate mesh currents of resistor network**

    Rice University, course project, Nov. 2011- present
    using C++/ C/ MPI
    last semester, read in .msh file generated by *Gmsh*, created a serial C++ code to build circuit matrix and load vector, chose unknowns to be mesh currents, represented by sparse matrix, determined the mesh currents in each quadrilateral element using *Jacobi/GS/SOR/CG* iterative solvers
    This semester, parallelized the code using MPI, used *Odd-Even* parallel sort to find interconnectivity of the resistor network, solved the resistor network problem in distributed recursive manner

- **Library management system**

    Zhejiang University, course project, Nov. 2010 - Jan. 2011
    using C++ and Microsoft SQL server
    designed the GUI, database, logic

- **Enhance the performance of the Design Space MATLAB Toolbox**

    Biomedical Engineering Department, UC Davis, research project, July. 2010 – Sep. 2010
    did a replacement in the matrix to tradeoff memory with time.

- Graduate Research for This Coming Summer:
  Finite Difference Implementation using SIMD vector instructions on CPUs