806 College Ave Apt 20

Clemson SC 29631

USA

**EMPLOYMENT**

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| **SRIRAM MADHIVANAN** |

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**Teaching Assistant** **Clemson University** **Fall 2015 – Present**

* Course: ECE 2080 Electrical Engineering Lab 1
* Objective is to introduce electrical measurement techniques, theory and experimental verification of theo-rems and concepts of Electrical Engineering.

**Associate Consultant** **Infotrellis Inc.** **Jul 2012 – Dec 2014**

* Performed end-to-end Extraction Transformation and Load (ETL) tasks from requirement analysis to system study, design, implementation, and documentation.
* Provided a report on search engine optimization possibilities for the company website.
* Created training material for various tools to get new hires on board.

**EDUCATION**

**Clemson, SC** **Clemson University** **Spring 2015 – Present**

* M.S. in Computer Engineering, GPA: 3.64
* Graduate Coursework: Data-Driven 2D Game Development, Advanced Data Structures, Operating Systems, FPGA design and Applications, Artificial Neural Networks, High Performance Computing with GPUs, Embed-ded Computing, Computer Communications, Network Security, MPI Programming in C.

**Chennai, India** **Anna University** **Fall 2008 – Spring 2012**

* B.E. in Electrical and Electronics Engineering, GPA: 8/10
* Undergraduate Coursework: Digital Signal Processing, Digital Logic Circuits, Data Structures and Algorithm, Numerical Methods.

**TECHNICAL EXPERIENCE**

**Projects**

* **Kakuro Solver** (Python). Implemented a solver for the kakuro puzzle in python using object oriented pro-gramming.The design lists all possible solutions. Solution is obtained by reducing the possible combinations based on the intersection information.
* **Acceleration of Huffman Coding using MPI and CUDA** (C, MPI, CUDA). Implemented Huffman coding usingCUDA and MPI to achieve scalable speedup for compression and decompression in a proprietary file format. Obtained maximum speedup of 13.5 and 15 with MPI and MPI-CUDA implementations respectively.
* **Device Driver** (C). Implemented a device driver for PCI graphics card in Linux 4.3.3 to draw triangles usingFIFO as well as DMA facility.
* **Data Driven 2D Game** (C++, SDL1.2). Created a data driven 2D game of fighter genre with option of pvp orpvAI. Code is done on C++ using SDL1.2 library. Singleton, factory, strategy, flyweight and observer patterns were used.
* **Acceleration of Kalman Filtering using OpenCL for FPGAs** (C, OpenCL). Developed a hardware solution toaccelerate a 2D Kalman filter using OpenCL. Certain portions were successfully accelerated, but the overall design was slower than the CPU implementation.

**LANGUAGES AND TECHNOLOGIES**

* C++, C, Python, Java, Matlab, JavaScript, CUDA, MPI, OpenCL, VHDL, SQL.
* Eclipse, Visual Studio, MongoDB, Microsoft SQL Server, DB2, Teradata, DataStage, Informatica.