

Supriya Chinthavali/Oak Ridge National Laboratory

Qualifications

- Expertise in building complex data and visual analytic products for supporting knowledge discovery and decision making.
- Software Programming experience in most high level languages (C, C++, Java etc) of more than 10 years.
- Demonstrated strong technical skills in developing complete projects in the energy domain by collaborating with multi-disciplinary teams.

Education and Training

- 2015 **(M.S) in Computer Science and Engineering**
Georgia Institute of Technology, Atlanta, Georgia USA.
(Will be graduating in Dec, 2015)
- 2008 **(M.S) in Automotive Embedded Systems**
Manipal Academy of Higher Education, Karnataka, India.
- 2005 **B.E. in Electronics and Communications Engineering**
Vishweshwariah University of Technology, Karnataka, India

Research and Professional Experience

Computer Scientist, Mar. 2012-present, Oak Ridge National Laboratory (ORNL), Oak Ridge, Tennessee.

- Development of a Project Finance Mapping Tool to allow stakeholders from DOE- EPSA to quickly evaluate the financial impacts of select policy choices for new power projects.
- Development of a web-based CHP potential analysis tool at a national scale using IGATE-E product data.
- Development of a Tableau based financial policy mapping tool at a national scale for the Energy Policy and System Analysis Office of DOE that would allow evaluation of the impact of various policy levers on the financial viability of generation and storage resources across the country.
- Development of the visualization platform for stakeholder observation based upon DOE- OE developed VERDE platforms and protocols for SPIDERS program.
- Configuration of general query frontend prototype against Medicare claims data with geographic drilldown using Tableau.
- User interface setup of an interactive web-based BI tool to display correlation b/w Medicare and Medicaid costs for dual Eligibles using Tableau.

- Development and maintenance of production Geoservers used for the Energy Awareness Resiliency Standardized Services program.

Post Master's Research Associate, 2010 (Mar) –2012(Mar), Oakridge National Laboratories, Knoxville, TN

- Development of a complete application that displays in real-time the distribution level outages for the USA at county level on the Google Earth using Java platform (J2EE) and Tomcat Web servers.
- Development of critical applications for the Electric grid using Space-time Awareness Tool (STAS) such as displaying real-time status of the US Electric Grid(Transmission level).
- Development of visualization layers for the Strategic Materials supply and production chain worldwide to provide wide area situational awareness.

Advanced Software Engineer , 2008 (April) – 2008(Sept), Delphi Automotive Systems, Bangalore, India.

- HWI interface development for the DCM2.5 program at Delphi Luxembourg, LUX using 16 bit XC2786 micro for CAN, PORT, ADC and PWM Modules.
- Device Driver Development for the 32bit Renesas Microcontroller (SH27513)for the Toyota MY011 program using the CDSW architecture.
- Integration of the AUTOSAR Device Drivers with the platform layer software of the Toyota MY011 program ECU.

Software Engineer, 2005(June) – 2008 (March), Delphi Automotive Systems, Bangalore, India

Selected Publications

1. Barker, A., Freer, E., Chinthavali, S. et al. Automating Natural Disaster Impact Analysis: “An Open Resource to Visually Estimate a Hurricane’s Impact on the Electric Grid”, Proceedings of the IEEE Southeastern Conference, April 4-7, 2013.
2. M. Olama, K. Spafford, O. Omitaomu, S. Chinthavali, and S. Fernandez, “High Performance Computing for Real-Time Detection of Large Scale Power Grid Disruptions,” Proceedings of the Modeling, Simulation, and Optimization for the 21st Century Electric Power Grid Conference, Oct. 21-25, 2012.
3. M. Shankar, S. Chinthavali, “An Information Overlay for Grid Stability Alerts”, Proceedings of the 7th Annual CIGRÉ Canada Conference on Power Systems, Sept 24-25, 2012