SURAJEET BHARATI

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EXPERIENCE

Mentor Graphics, Lead Member Technical Staff   August 2017 - Present
Language used - C   *Kolkata, India*

· Being part of the HDL Simulation Team, replaced the skeleton data structure used for internal representation of an elaborated HDL design from Tree to Graph. Achieved up to 12x improvement in performance and memory requirement for several customer designs.
· Designed and implemented several parts of the Global Analysis module, used for property propagation throughout elaborated HDL design which in terms helps to generate optimized byte-code.
· Working on performance improvement of the Global Analysis module through independently figuring out performance bottlenecks in the system and then modifying relevant implementation. Improved run-time of the module up to 3x for some real-life customer designs.

Polaris Networks, Software Development Engineer   July 2015 - July 2017
Languages/Frameworks used - C, C++, C#, Qt   *Kolkata, India*

· Worked on Protocol Stack development for core features of MCE Emulator of LTE network.
· Developed several parts of the software modules and user interface of Anritsu Spider, an automated, scalable Radio Frequency emulation platform.
· Co-designed and implemented the console and relevant server side APIs of Polaris Functional Tester, a server-client architecture based tool used for compliance testing of LTE network nodes.

PROJECTS

Development of Filters for Transcription between Documents   July 2014 - April 2015
Languages/Frameworks used - Java Servlet, JFlex   *IIEST, Shibpur*

· Designed and implemented filters for transcription of typed Bengali documents into English scripts and vice-versa using Java Servlet and Lexical Analyzer.

Automated Video Classification & Categorization   May-July, 2014
Language used - Matlab   *ISI, Kolkata*

· Automated the process of categorizing a video especially a movie through performing pixel-level comparison of consecutive frames using existing Image Processing algorithms.

EDUCATION

Indian Institute of Engineering Science & Technology, Shibpur   May 2015
Bachelor of Engineering, Computer Science & Technology   *CGPA: 8.74 / 10*

Burdwan Municipal High School, Burdwan   May 2011
Higher Secondary, Science   *84.6%*

PROGRAMMING SKILL

· Over 5000 lines of code: C, C++
· Over 1000 lines of code: C#, Java, Matlab
· Prior Experience: Tcl, Shell script, Qt