Vaibhav Yenamandra

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Education

Master of Science, Computer Science **Aug 2016 – Dec 2017 (Est.)**
University of Florida (CGPA: 3.47/4) Gainesville, FL, USA
Coursework: Programming Languages, Algorithm Analysis, Data Structures, Machine Learning, Data Mining

Bachelor of Engineering, Electrical and Electronics Engineering **Aug 2010 – May 2014**
Birla Institute of Technology and Science - Pilani (CGPA: 6.68/10) Pilani, India
Coursework: Analog and Digital VLSI Design, Microelectronic Circuits, Communication Systems

Technical Skills

Programming Languages	Python, C++, Java, Ruby, Elixir
Software & Tools	MPI, CMake, CUDA, OpenCV, Linux, LaTeX
Web Technologies	Ruby on Rails, Sinatra

Work Experience

Consultant, Business Analyst **Jun 2014 – Jul 2016**
Capgemini India Pvt. Ltd. *Mumbai, India*

- Liaisoned between business, development, and QA stakeholders to ensure service level agreements were met
- Acted as primary point of contact for a part of the project's software stack
- Automated 6 of 8 offshore reports leading to total time savings upwards of 3 hours daily

Projects

Summer Research - Automatic Terrain Identification **May 2017 – Sep 2017**
Big Data, Parallel Processing, CUDA, MPI

- Responsible for GPU accelerating boundary detection code using CUDA
- Achieved speedup of almost 200 by reducing run time from 65 min to 20 sec
- Optimized I/O, inter process communication to scale the existing framework from the initial 1000 × 1000 pixel to 100,000 × 100,000 pixel satellite imagery

Distributed Cryptocurrency Miner **Sep 2017 – Present**
Distributed Systems, Elixir, Erlang

- Implemented a distributed cryptocurrency miner in Elixir that used an actor model of concurrency to distibute work among networked workers
- Utilized 88-95% of available CPU cores to sustain 65k green threads evaluating 1.8 million hashes per second on a mid-range laptop.

Rubygem – PCG Random **Sep 2017 – Present**
C, Ruby, Random Number Generation

- Published a Ruby C extension providing the PCG family of random number generators
- The C extension matches and outperforms Ruby2.1's Random method for generating Big-Integers; otherwise, matching it

Statistics Library **Jun 2016 – Present**
Statistics, Random Number Generation , C, Ruby

- Published a Ruby library implementing statistical primitives for the Ruby language, providing functions not currently available in the language

Extracurricular

Project Leader, Course Planner, UF Open Source Club **Feb 2017 – May 2017**
Mainter, *distribution* repository, *SciRuby* project **May 2016 – Present**