# Vaibhav Yenamandra

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vaibhav-y

theyenaman

theyenaman.me

### **EDUCATION**

Master of Science, Computer Science

University of Florida (CGPA: 3.47/4)

Aug 2016 - Dec 2017 (Est.)

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 Web Technologies MPI, CMake, CUDA, OpenCV, Linux, LATEX Ruby on Rails, Sinatra, HTML, CSS, Javascript

### WORK EXPERIENCE

Consultant, Business Analyst

Jun 2014 - Jul 2016

Mumbai, India

Capgemini India Pvt. Ltd.

- 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 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.

### ${\bf Rubygem-PCG\ Random}$

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 **Mainter**, distribution repository, SciRuby project

Feb 2017 - May 2017 May 2016 - Present