Dhruv Jain

djain@clemson.edu
dhruv-jain.github.io
Ph.# (864) 633-7483

EDUCATION

Clemson, SC **Clemson University**

- M.S. in Computer Science; GPA: 3.4 **Spring 2017**
  Coursework – Network Technologies Security, Energy Efficient Computing, OO Software Design, DBMS, Software Architecture, Theoretical CS, Data Science, Software Verification & Validation.
- B.S. in Computer Science; GPA: 3.3; Dean's List – Spring 2013, Fall 2014. **Fall 2014**

EMPLOYMENT

Clemson University, SC **Web Developer** **April 2015 – Present**

- Lead developer clemson.edu/studentaffairs and clemsondesign.com – cross-browser responsive HTML design using CSS, JavaScript and Bootstrap which included a dynamic calendar and social media feed.
- Developed and designed a wide range of HTML email templates that were responsive and modular.
- Worked on numerous projects like flipping book, iBook, microsites, 3-D printing, WordPress sites and plugins using both front end and back end technologies.
- Developed airplane request application in collaboration with team using PHP, HTML, CSS and JavaScript.
- Maintain and resolve IT help tickets rising from different student affairs web pages like social media integration.
- Supervise and mentor various IT interns and design interns.
- Developed new features, bug fixes and deployed job tracking and invoice billing app designed in python and Django.

Itron, Inc., SC **Software Development/QA Engineer Co-op** **May 2013- May 2014**

- Designed and executed manual unit test plans for new metering hardware platforms and ZigBee devices.
- Integrated and tested GE meters with Itron Communication Modules.
- Investigated behavior of gas modules sending data to the meter and then reading data from the Itron network.
- Analyzed ZigBee Smart Energy Profile (SEP) 1X packets for accurate communication with meters about energy usage.
- Conceptualize TI CC2530 System-On-Chip IC and Z-stack to develop a low-cost ZigBee SEP 1.X HAN device.
- Added functionality into C# .NET software to support Unicode character set and inclined block pricing.

ACADEMIC PROJECTS

- **Energy Efficient Computing:** Power Benchmarking, Empirical Analysis and Stress Tests of Intel Processors Xeon Phi Knights Landing vs Knights Corner.
- **Software Defined Networking and Network Function Virtualization:** Built a virtual intrusion detection system based on NFV. Used Xen Cloud Platform, ClickOS and Deep Packet Inspection.
- **Packet Spoofing (2015).** ICMP headers and Ethernet frame headers were built in a custom fashion using SOCK_RAW in order to demonstrate packet spoofing.
- **Data Science:** Worked on several data sets to extract knowledge using R and python. Applied Analyzed World Development indicators and Global Terrorism datasets.
- **C++ Game Design:** Developed a 2-D game engine using Simple Direct Media Layer and Standard Template Library. Implemented Object Oriented design patterns like MVC, Singleton, Flyweight, Observer, Factory method.
- **MeTube Web App:** Designed and developed a web application similar to YouTube using PHP and HTML.
- **Human Computer Interaction:** Designed a working fitness mobile application prototype in iOS.
- **Creative Inquiry:** Designed and developed a LED memory game for children using Arduino microcontroller board.
- **Distributed Computing:** Gained experience in parallel programming – Hadoop, Mad Reduce, OpenMP and MPI.
- **Android Application Project:** Developed *Class Scheduler* Android application using Java and Eclipse.

LANGUAGES AND TECHNOLOGIES

- **Programming** – C, C++, Java, R, MPI, OpenMP, Scripting, TCP/IP, Socket Programming, MacOS, Linux, Windows
- **Web** – HTML, CSS, DOM, JavaScript, JQuery, PHP, Nginx, MySQL, Google Analytics, WordPress, Cascade CMS
- **Design**- Adobe Creative Cloud Suite – InDesign, Photoshop, Illustrator
- **Software** – Office, Eclipse, Visual Studio, Hadoop, Git, R-Studio, Titanium Studio