

# Dhruv Jain

[djain@clemson.edu](mailto:djain@clemson.edu)  
[dhruv-jain.github.io](https://github.com/dhruv-jain)

Ph.# (864) 633-7483

## EDUCATION

Clemson, SC	Clemson University	Fall 2015 – Spring 2017
<ul style="list-style-type: none"><li>M.S. in Computer Science; GPA: 3.4 Coursework – Network Technologies Security, Energy Efficient Computing, Theoretical CS, OO Software Design, DBMS, Software Architecture, Data Science, Software Verification &amp; Validation.</li><li>B.S. in Computer Science; GPA: 3.3; Dean's List – Spring 2013, Fall 2014.</li></ul>		

## EMPLOYMENT

Clemson University, SC	Web Developer	April 2015 – Present
<ul style="list-style-type: none"><li>Lead developer <a href="http://clemson.edu/studentaffairs">clemson.edu/studentaffairs</a> and <a href="http://clemsondesign.com">clemsondesign.com</a> – cross-browser responsive HTML design using CSS, JavaScript and Bootstrap which included a dynamic calendar and social media feed.</li><li>Developed and designed a wide range of HTML email templates that were responsive and modular.</li><li>Worked on numerous projects like flipping book, iBook, microsites, 3-D printing, WordPress sites and plugins using both front end and back end technologies.</li><li>Developed airplane request application in collaboration with team using PHP, HTML, CSS and JavaScript.</li><li>Maintain and resolve it help tickets rising from different student affairs web pages like social media integration.</li><li>Supervise and mentor various web interns, developing student learning outcomes and measuring success.</li><li>Developed new features, bug fixes and deployed job tracking and invoice billing app designed in python and Django.</li></ul>		
Itron, Inc., SC	Software Development/QA Engineer Co-op	May 2013- May 2014
<ul style="list-style-type: none"><li>Designed and executed manual unit test plans for new metering hardware platforms and ZigBee devices.</li><li>Integrated and tested GE meters with Itron Communication Modules.</li><li>Investigated behavior of gas modules sending data to the meter and then reading data from the Itron network.</li><li>Analyzed ZigBee Smart Energy Profile (SEP) 1X packets for accurate communication with meters about energy usage.</li><li>Conceptualize TI CC2530 System-On-Chip IC and Z-stack to develop a low-cost ZigBee SEP 1.X HAN device.</li><li>Added functionality into C# .NET software to support Unicode character set and inclined block pricing.</li></ul>		

## ACADEMIC PROJECTS

- Energy Efficient Computing:** Power Benchmarking, Empirical Analysis and Stress Tests of Intel Processors Xeon Phi (Knights Landing) vs Xeon Phi (Knights Corner) on Palmetto cluster, high performance computing resource.
- Software Defined Networking and Network Function Virtualization:** Built a virtual intrusion detection system based on NFV. Used Xen Cloud Platform ClickOS which supports Deep Packet Inspection by string matching.
- 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 R-Studio. 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, Map 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