# Alexander Rao

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Electrical Engineer with experience with software creation and a variety of corporate cultures, as well as in data analytics. Strengths center around software and hardware development and working with a variety of individuals to deliver quality products. Also experienced with POSIX systems, with programming knowledge spanning 18 languages.

## EDUCATION

**Georgia Institute of Technology**                                                                            **Atlanta, GA**
BSEE with a minor in CS; Study abroad in France – GPA 3.95/4.00                    Expected December 2019

## PROFESSIONAL EXPERIENCE

**EMS Engineer**                                                                                               *08/18 to Present*
- Helping Southern Company monitor and react to changes in the power grid

**Energy Transmissions Engineer for Southern Company**                                    *05/17 to 08/18*
- Maintaining and improving transmission methods for Southern Company.

**Ambassador for MathWorks, Inc.**                                                                    *03/17 to Present*
- Informing Georgia Tech students about how MATLAB can solve their real-world problems.

**Data Analyst for THG Energy Solutions**                                                          *12/16 to 04/17*
- Analyzed the possible relationship between electricity pricing and carbon emissions.

**Teaching Assistant for MATLAB**                                                                    *08/16 to Present*
- Currently teaching MATLAB to Georgia Tech Engineering Students.

**3D Printing for the Chickasaw Nation**                                                            *08/16 to 04/17*
- Developed 3D printing solutions to print signage and artifact descriptions in Braille for the visually impaired.

**Data Analytics Internship with Experian Health**                                              *Summer 2016*
- Created software for adding users to their Tableau-based healthcare business analytics system.

**Digital Internship for the Chickasaw Nation**                                                    *01/16 to 05/16*
- Designed a digital library to store cultural and historical documents for use by researchers at the Nation.

**Internship with Stinnett & Associates, LLC**                                                    *Summer 2015*
- Created Applicant and Inventory Tracking systems.

**Research Assistant at the University of Tulsa**                                                  *Summer 2014*
- Studied different epoxies' reactions to high water pressure in a standard deep-water oil pipe.

## LEADERSHIP

**Boy Scouts of America (BSA)**
- Eagle Scout and Double Eagle - *2012*
- Senior Patrol Leader of Troop 26 in *2013*
- Attended Philmont and Sea Base BSA High Adventure Base, *2011 to 2013*

## AWARDS & HONORS

- Pat Morris Award – *2015*. Awarded to the graduating senior who most exemplifies the school's ideals of honor, loyalty, and courtesy, as well as having the highest academic achievements.
- Varsity Team Captain of Cross Country, *2011 to 2014*
- Cum Laude Society of Holland Hall in *2014*
- National Merit Scholar in *2014*
- Scoutmaster's trophy from BSA Troop 26 in *2014*

## SKILLS

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|---|---|
| **Programming:** | Java, MATLAB, Python, VB.NET, SQL, PHP, JavaScript, C, C++, C#, F#, Assembly, HTML5, CSS3, Bash, PowerShell, VHDL, FPGA, VBA, Batch, ASP.NET, LaTeX, Racket, Markdown. |
| **Concepts:** | Object-Oriented & Script Programming, Circuit Design, Calculus, Differential Equations, Boolean Algebra, Computer Architecture, CPU Design, LC-3, Microcode, Signals Processing, Embedded System Design, Quantum Mechanics, UWP, Git/SVN, TCP/IP, UDP, HTTP/S, CLR, .NET Framework, .NET Core, MVC, SSL, RFC 2898 & SHA. |
| **Software:** | Microsoft Office, Altera Quartus, Blender, NI Software, SimuLink, IntelliJ, PyCharm, Visual Studio, MySQL, SQL Server, PSSE, Windows, Linux, macOS. |