

# MAGGIE LOU

Portfolio: Maggie-Lou.github.io

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## EDUCATION

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**Northwestern University** | McCormick School of Engineering Evanston, IL  
Bachelor of Science Degree | Computer Science Expected Graduation: June 2019

- Cumulative GPA: 3.89/4.00
- Murphy Scholar (\$4000 grant to pursue entrepreneurship, weekly seminars by Northwestern research faculty)
- Honors: Dean's List Academic Honors 3 quarters, National Merit Scholar 2015

## EXPERIENCE

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**Over** Cape Town, South Africa  
*Data Science Intern* July 2016 – August 2016

- Created a KPI dashboard using Ruby and R that scrapes data analytics platforms and updates daily to promote transparency within the company, establish a baseline for company goals, and evaluate marketing success
- Developed the back-end of the beta version of an iOS text-generation feature; included writing scripts in R, managing a SQLite database, creating an API, and working with image recognition and natural language processing

**QuesTek Innovations LLC** Evanston, IL  
*Technology Analyst* March 2015 – June 2015

- Wrote programs in C++ and MatLab that interface with materials science databases and thermodynamic calculation software, eliminating 3-4 hours per project of manually inputting thousands of data points
- Modified a data mining decision tree in R to more accurately map to the data; returned a  $R^2$  value of 0.958

**Segal Design Institute** Evanston, IL  
*Biomedical Design Analyst* September 2015 – December 2015

- Evaluated 150 patents by mapping major design changes onto a timeline of bacterial breakouts to determine high-risk innovations; recommendations were presented to biomedical design experts to guide future instrument redesigns

**Spectrum Retirement Communities** Denver, CO  
*Data Analytics Intern* May 2015 – August 2015

- Wrote demographic programs in Java and Alteryx that compiled the personal information of over 4,000 clients; helped the marketing team identify a target demographic of 48-55 year old females
- Created data-driven models to predict occupancy rates of potential sites and the success of marketing efforts; concluded an optimal 15 mile radius to guide the marketing team to narrow its advertising range

## LEADERSHIP

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**RezEssentials** Evanston, IL  
*Marketing Director* October 2015 – August 2016

- Designed advertisements and negotiated marketing partnerships with local publications to increase revenue by 30%
- Redesigned the website to use SEO techniques, like keyword research, indexable content, and crawlable link structures; site is now ranked first on Google for the top five search terms and site traffic increased by 32% per day

**Alpha Kappa Psi Business Fraternity** Evanston, IL  
*Pledge Class President* October 2015 – June 2015

- Ensured that 23 members of the pledge class reached benchmarks and committee goals required for initiation
- Oversaw three internal committees responsible for fundraising, professional development, and social activities

## ADDITIONAL

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**Languages:** English (Native), Mandarin (Intermediary)

**Technical Skills:** C++, R, SQLite, MATLAB, Java, HTML, CSS, JavaScript, Alteryx, Microsoft Office

**Memberships:** Dance Marathon (External Website Programmer), Delta Gamma Sorority, Society of Women Engineers

**Interests:** Front-End Development, Data Science, Travel, Skiing, Exotic Foods, Photography, R&B Music, Adrenaline