# G REX SUMSION

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## EDUCATION

**Brigham Young University,** Provo UT, *Graduate December 2019*
*Double Major: Bioinformatics and Statistics with Biostatistics emphasis (GPA 3.92)*
*Minor: Computer Science and Mathematics*
Relevant Coursework:
Completed: C++ programing, Data Structures and Algorithms, Discrete Structures,
Advanced Programming Concepts, Algorithm Design and Analysis, Molecular
Biology, Applied R programing, Advanced French Literature, French Culture.
Currently Enrolled: Algorithm Design and Analysis, Analysis of Variance, Genetics

## EXPERIENCE

**Research Assistant,** Dr. Stephen Piccolo, Provo, UT*, April 2017 - Present*
- Collaborate with team to build software that helps scientists without bioinformatics skills to filter datasets using Python and R
- Automated filter python scripts to download files, install software, and filter metadata
- Processed the LINCS genomic data that are originally 50 GB in size; My code uses the Python h5py library to filter and reformat this data in 3 hours with 500 MB of ram
  https://github.com/glenrs/WishBuilderData
- Mentor two students in development of WishBuilder
  https://github.com/srp33/WishBuilder/issues
- Made improvements to the webserver to efficiently download .csv files
  https://github.com/srp33/Geney

**Bioinformatics Research Group Project Leader,** BYU, *Aug 2017 -  Present*
- Lead a research team of 8 students through understanding and implementing differing machine learning algorithms to answer research questions
  http://brg.byu.edu
- Implemented Scikit-Learn Python machine algorithms for studying hyperspectral images
- Results are accepted to be published in PeerJ
  https://github.com/byubrg/NIST-Competition-Fall-2017
- Working on the CAMDA DRUG safety challenge
  https://github.com/byubrg/CAMDA_CMAP_Challenge
- Other duties include contacting companies in close proximity for possible club tours

## SKILLS

Fluent in Python, R, bash, Git
Familiar with C, SQL, Java, C++, Html, JavaScript
Proficient in Vim, Visual Studio Code, Microsoft Excel, Word, and PowerPoint
Fluent in the French Language