## **Brian Newsom**

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**Objective** To apply my software engineering, mathematics, and teamwork experience in a full time position. **Education** University of Colorado Boulder, CO B.S. Computer Science—Software Engineering, B.S. Applied Mathematics Spring 2016 Accolades Winner of national hackathon - HackCU, finalist in SXSW Music Hackathon Championship GPA: 3.95, Engineering Dean's List, National Society of Collegiate Scholars **Recent Coursework** CSCI 4448 — Object Oriented Analysis & Design CSCI 3104—Algorithms CSCI 4830—Human Centered Big Data APPM 4660—Intermediate Numerical Analysis II **Technical Skills** Technical Skills: Object Oriented Programming, Hadoop, Git, Message Queues, Functional Programming, SQL, Unix System Administration, SVN Programming Languages: Java, JavaScript, Scala, C++, Python, Ruby, HTML, PHP, Bash, MATLAB Work June 2015—Aug. 2015 Software Engineer Twitter, Boulder Served as a full-time engineer on enterprise agile team to design and build *highly* scalable and fault tolerant real time API in Scala Refactored and improved existing Ruby on Rails applications for maintainability Optimized engineering effectiveness by creating and revamping deploy tools Software Engineer Datalogix, Westminster June 2014—Sep. 2014 Worked on Agile Team to design flexible, scalable data ingestion pipeline in Java Paved way to decrease ingestion time  $\sim 10x$ Ensured quality with unit testing (*JUnit*) and integration testing (*Cucumber*) Web Developer University of Colorado, Boulder Feb. 2015—Present Developing front (HTML) and back end (Java) of physics education technology website, supporting translation and scalability - 80 million views per year University of Colorado, Boulder Aug. 2013—June 2014 **Programming Specialist** Contributed to Scientific Python (SciPy) library on GitHub, allowing numerical integration of compiled C from Python, decreasing run time  $\sim 10x$ **Personal Projects** GiveHub - Donate To Charity With a Tweet Apr. 2015 Node JS application applying Twitter stream API and natural language processing to make donation possible with a tweet to an organization **SetStory.io** - Valuate A Music Festival Lineup Apr. 2015—Present Beautiful dynamic lineup builder for festival planners to create the optimal revenue generating event, backed by a multitude of API data Collaborative Music Creation - Web Application July 2013—Aug. 2014 Taught self and applied Symfony2 PHP Framework towards scalable, design consistent website that allows individuals to make music together Volunteer Work **Navigators Campus Ministry** Aug. 2012—Present

Lead worship once a week, planning songs and playing drums

Tutored elementary/high school students in mathematics and other fundamentals

Feb. 2013—May 2013

Family Learning Center, Boulder, CO

Tutor/Mentor