***Summary***

An accomplished software developer with expertise in web application development. A quick learner, passionate, and well-rounded team member interested in all types of software development.

***Areas of Expertise***

* Web application development and administration
* Team building and interpersonal communication
* Strong mentoring skills

***Skills Highlight***

*Programming Languages*

Python, Java, PHP, C++, C

*Web Backend Development*

Django, Flask, Apache, Jekyll, Git, Anaconda

*Database Development*

PostgreSQL, SQLite, MySQL, MariaDB

*Web Frontend Development*

JavaScript, jQuery, HTML, Markdown, CSS, Bootstrap, .NET

*Operating Systems*

RedHat6, CentOS6, Ubuntu, OSX, Windows

*Other Products*

*Jira, Confluence, GitHub Projects, Photoshop*

***Professional Experience***

Lawrence Livermore National Laboratory Software Developer (May 2012 – Present)

* Team lead and Lead developer for vCDAT GUI for *Ultrascale Visualization Climate Data Analysis Tools* (UV-CDAT) using React and Redux with a Flask backend. Led a team consisting of eight members. Assigned work using Jira and GitHub. Released December 2017 the abilities of selecting, editing, and plotting user data.
* Wrote and deployed Django, PostgreSQL web applications. Publication Hub a white paper publication tracker with meta data capture and search capabilities. UV-CDAT Usage a dashboard displaying and collecting UV-CDAT user data. ACME Dashboard v1 the prototype for starting, monitoring, and viewing climate model runs/output. CDATWeb the first version of vCDAT where the data, and compute node ran on an GPU cluster.
* Wrote, designed and developed a Python library *Webengine* to automatically scrape all visible pages of outdated sites and converting them to Markdown/Jekyll pages.
* Contributed to the Earth System Grid Federation’s (ESGF) original web portal using HTML, JavaScript and a Java Swing backend built with Apache Ant running on Apache TomCat.
* Build Engineer creating Anaconda builds, testing, and deploying UV-CDAT and vCDAT.
* Systems administrator for eight GitHub Organizations and all their repositories.
* Mentored and trained new hires and interns. Led recruiting efforts for entire laboratory at California State University Chico.
* DOE “Q” clearance.

Lawrence Livermore National Laboratory Intern Software Developer (Jan 2011 – May 2012)

* Development on the Enterprise Reporting Workbench(ERW) using Oracle JDeveloper 11g, ADF, JSP, JSF and SVN.

Auctiva Intern Software Developer (May 2010 – August 2010)

* Implemented feature enhancements and bug fixes for corporate web site, a C#, asp.net web application running on an ISS server.

***Education***

California State University, Chico (May 2012)

Bachelor of Science in Computer Science; Minor in Mathematics.

***Publications***

Matthew Harris, “Webengine”, Proceedings of the World Congress on Engineering and Computer Science 2014, Vol. I, WCESC 2014, 22-24 October 2014, San Francisco, USA, pp. 131-135, ISBN: 978-988-19253-6-7

Matthew B. Harris, Samuel B. Fries, Sterling A. Baldwin, and Dakotah S. M. Webb, "Nerd Herding: Practical Project Management in the Field" Proceedings of The World Congress on Engineering and Computer Science 2015, Vol. I, WCECS 2015, 21-23 October 2015, San Francisco, USA, pp123-126, ISBN: 978-988-19253-6-7

Sterling A. Baldwin, and Matthew B. Harris, "Science as a Service," Lecture Notes in Engineering and Computer Science: Proceedings of The World Congress on Engineering and Computer Science 2016, 19-21 October 2016, San Francisco, USA, pp407-409, ISBN: 978-988-14047-1-8

Matthew B. Harris, Sam B. Fries, Dean N. Williams, Sterling A. Baldwin, James W. Crean, Bryce J. Sampson, Edward M. Brown, and Anna Paula M. Pawlicka, "The Legend of CDAT: A Link to the Past," Lecture Notes in Engineering and Computer Science: Proceedings of The World Congress on Engineering and Computer Science 2016, 19-21 October 2016, San Francisco, USA, pp181-184, ISBN: 978-988-14047-1-8