

Christina Branson

Software and IT Professional

Philadelphia, PA - Email me on Indeed: [indeed.com/r/Christina-Branson/432b9909f487fef4](https://www.indeed.com/r/Christina-Branson/432b9909f487fef4)

Willing to relocate to: Philadelphia, PA

Authorized to work in the US for any employer

WORK EXPERIENCE

Software Engineer

ARCHARITHMS, INC - Huntsville, AL - 2013 to Present

Key Software Personnel for development of the software aggregation and analytics component of the United States Army Corps of Engineers (USACE) Meter Data Management System (MDMS)

- Supported proposal development, requirements development, labor estimates, and scheduling for key software tasks for the MDMS Program
- Developed algorithms and prototypes to provide enhanced analytics of data for the MDMS Program
- Developed models, coded algorithms, created analysis scripts and created log file parsing scripts in support of the CRAM C2 Program
- Performed analysis to support requirements development for the CUAS capability
- Prototyped Sensor Resource Management software and analyzed performance
- Developed software for both standalone applications and distributed simulations
- Authored technical documents and manuals; developed, tested, and maintained software, analyzed software performance
- IRAD Principal Investigator (PI) for development of two eCommerce websites
- Installed and maintained servers and applications for the company including websites, content management servers, Git/Subversion repositories, and a Jenkins continuous integration environment
- Supported proposal development of SBIR/STTR for DoD

Software Engineer

OPTICAL PROCESSING TECHNOLOGIES and SYSTEMS Inc - Huntsville, AL - 2012 to 2013

Led a seminar as part of the University Of Alabama in Huntsville Mathematical Sciences Colloquium which explored the theoretical foundation of Principal Component Analysis (PCA)

- Programmed within Octave an implementation of PCA directly from the algorithm to be used in classification software for Optical Character Recognition (OCR)
- Expanded the capabilities of the OCR using blob detection and Fourier techniques to find randomly placed digits in an image

Graduate Research Assistant

UAH ATMOSPHERIC SCIENCES DEPARTMENT - Huntsville, AL - 2010 to 2012

Research: Performed statistical analysis to compare the performance of a control model run and an assimilated satellite observed cloud model run in simulating cloud fraction and aerosol concentrations. The model results were evaluated against satellite cloud cover observations and groundbased aerosol monitoring stations.

- Wrote original code using IDL and Fortran to calculate statistics, averages, and error on separate domains and time scales and generate graphs for visualization and presentation
- Demonstrated an ability to install, learn, and troubleshoot new software programs quickly

- Utilized scientific libraries in Fortran and Matlab for data analysis
- Prepared and edited research proposals US Government agencies

EDUCATION

Master of Science in Atmospheric Sciences

University of Alabama in Huntsville - Huntsville, AL

2012

Bachelor of Science in Mathematics/Physics

Rowan University - Glassboro, NJ

2009

CERTIFICATIONS

CompTIA Security +

October 2011 to October 2017

Secret Security Clearance

2012 to 2018

ADDITIONAL INFORMATION

TECHNICAL SKILLS

PHP, Java, C#, C++, Perl, Matlab, HTML5, Javascript, jQuery, CSS, MySQL, MS SQL Server, Wordpress, IBM Cognos, MS Office, Nuxeo, SharePoint, Git, Subversion, CompTIA Security+ Certification