

HANNAH AKER

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INDUSTRY EXPERIENCE

AFMC-OCALC, 76th SMXG, 555th MXDED

Summer 2014, Summer 2015

SMART Intern

Oklahoma City, OK

- Designed and implemented software tool to view and edit aircraft engine data files for use in developing and testing CETADS (Comprehensive Engine Trending and Diagnostics System), using C#, Windows Forms, WPF, XAML, and MVVM architecture.
- Summer 2014: created proof of concept program with complete functionality in Windows Forms, and created test cases for CETADS by hand using a hex editor.
- Summer 2015: improved original program using WPF, XAML, and MVVM structure, then recreated the program for a different engine.
- Supervisor: Francesco Whittenberger, francesco.whittenberger@us.af.mil

TECHNICAL SKILLS

Programming Languages

C, C++, C#, Java, PHP, SQL

Operating Systems

Windows 7, Linux

EDUCATION

South Dakota School of Mines and Technology

August 2012 - Present

Bachelor of Science in Computer Science

Minor in Mathematics

GPA: 3.571

Academic Projects

- Mobile Computing - Teamwork in Agile Scrum to create Android application to facilitate communication between students for academic purposes, using Java for Android and MVC structure. Project work at github.com/SDSMT-CSC476/SP15-Team1-AndroidApp
- Digital Image Processing - Teamwork to implement Hausdorff face detection, where user provides template and image and the program will identify matches to the template in the image, using C++ and Qt. Project work at github.com/hannahaker/dip_project

Awards

- SMART Scholarship for Service, awarded July 2013 The Science, Mathematics And Research for Transformation (SMART) Program scholarship for service program is a national full scholarship leading to employment upon degree completion; sponsored by the Department of Defense(DoD). More information at smart.asee.org

Campus Involvement

- Symphonic Band (1st chair Bassoon)
- Lions Club, an international community service organization
- Student Aide (Graduate Education Office), Teachers Assistant (College Algebra Lab)

OTHER EXPERIENCE

SDSM&T Math and Computer Science Department

August 2015 - Present

Teachers Assistant

Rapid City, SD

- Lead college algebra lab, assist students with lab work, evaluate student lab work
- Supervisor: Dr. Donna Kliche, donna.kliche@sdsmt.edu

SDSM&T Graduate Education Office

May 2013 - Present

Student Aide

Rapid City, SD

- Process new applications, answer emails, manage applications spreadsheet in Microsoft Excel, file applications, and process incoming mail.
- Supervisor: Rachel Howard, rachel.howard@sdsmt.edu, (605) 355-3468

SDSM&T Math and Computer Science Department

September 2013 - February 2014

Student Aide

Rapid City, SD

- Run trials of provided MATLAB program, created Microsoft Excel spreadsheet of results
- Supervisor: Dr. Karen Braman, karen.braman@sdsmt.edu