Richard Taylor
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Summary of Qualifications

- Dynamic problem-solving skills developed through Air Force flight operations execution and management
- Strong programming skills (Python, C++, Java) and knowledge of operating systems (Unix, Windows)
- Eight years leading crew members in mission preparation and training apprentice crewmen
- 3200 flying hours and 10.5 years of experience as enlisted senior flight-crew member aboard KC-10A in-flight refueling aircraft
- Security Clearance: Secret

Education

Drexel University — Philadelphia, PA
Bachelor of Science in Computer Engineering — Anticipated Graduation: June 2016
Cumulative GPA: 3.57

Honors

Dean's Scholarship, Drexel University, 2013
Distinguished Graduate, KC-10A Formal Training Unit, September 2012
78th Air Refueling Squadron Non-Commissioned Officer of the Year, 2012
Air Force Reserve Command Outstanding Airman Aircrew Award, 2007
514th Air Mobility Wing Outstanding Airman of the Year Award Nominee, 2007, 2009, 2012

Skills

- Programming Language: C++, Java, VHDL, MATLAB, Python, Bash, C, Assembly (Intel, MIPS, and HC12), Arduino
- Operating Systems: Windows, Unix
- Software: PSpice, MATLAB, ModelSIM, Microsoft Office (Excel, Word, Powerpoint, Publisher), LabVIEW, Arduino, PCSPIM, ICCv12, AxIDE
- Machines: KC-10A aircraft systems

Cat Laser Toy Project

- Designed fully automated cat toy by combining laser pointer, Arduino board, speaker, motion sensor, servos, and battery pack
- Evaluated project goals and potential problems to develop workable design within budgetary and time constraints
- Coded random movements in Arduino utilizing noise from unused input pin; calculated distances for sensors to operate
- Summarized results in PowerPoint and demonstrated project; created additional toys for friends

Projectile Project

- Developed application utilizing MATLAB software coupled with Arduino microcontroller
- Utilized MATLAB to consider analog readings from an accelerometer attached to Arduino microcontroller hardware board
- Generated graphical user interface to allow user to calibrate and manipulate accelerometer; visualize an associated animation and data display

Experience

United States Air Force Reserve - 78th Aerial Refueling Sq. — McGuire Air Force Base, NJ
In-flight Refueling Craftsman — May 2006 to Present

- Evaluate annual employee performance reviews for team members based on merit and adherence to standards
- Manages, schedules, and assigns training events for multiple apprentice crew members; ensure complete documentation
- Develops and administers lesson plans and classroom training seminars for apprentice crew members
- Initiates and oversees the implementation of all required policies and procedures for ten assigned team members

United States Air Force Reserve - 78th Air Refueling Sq. — McGuire Air Force Base
In-Flight Refueling Journeyman — December 2003 to May 2006

- Enlisted senior flight-crew member aboard KC-10A in-flight refueling aircraft
- 10.5 years and 3200 flying hours of experience
- Conducts comprehensive pre- and post-flight aircraft inspections; diligently adheres to all aircraft operating manuals and technical orders
- Sole crew member responsible for safe on-load and offload of up to 150,000 pounds of aircraft cargo and equipment
- Sole crew member responsible for safe operation of multi-million-dollar system to refuel aircraft in-flight
- Accomplishes dynamic missions goals through exceptional teamwork with crews of varying sizes and ranks
- Coordinates with multiple agencies to ensure timely accomplishment of all mission objectives

Digital Logic Design Project

- Designed a 6-input Input/Output Expander which allows for the individual control of up to 62 outputs utilizing 2x4 decoders, 64 J-K flips-flops, gates, clock
- Collaborated with partner to develop circuit diagram for the I/O expander as well as an in-depth technical report on its operation
- Resolved problems with lack of versatility and input design by changing T flip-flop to J-K flip-flop
- Wrote technical report and demonstrated design through Logisim

Relevant Coursework

Design With Microcontrollers
Digital Systems and Projects
Digital Logic Design
Evaluation and Presentation of Experimental Data I, II
Advanced Programming for Engineers
Computer Organization and Architecture
Fundamentals of Materials

Other Education

Burlington County College — Mt. Laurel, NJ
Pursued Associate of Science — January 2010 to June 2013
Cumulative GPA: 3.9

Community College of the Air Force — McGuire Air Force Base, NJ
Pursuing Associate of Applied Science: Aviation Operations — Anticipated Graduation - June 2015
Cumulative GPA: 4.0

Airman Leadership School — McGuire Air Force Base, NJ
Continued Professional Military Education — June 2008

KC-10A Formal Training Unit — McGuire Air Force Base, NJ
KC-10A In-Flight Refueling Instructor Rating — June 2012 - September 2012

Antonio S. Foster

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Education

Drexel University — Philadelphia, PA
Bachelor of Science in Electrical Engineering — Anticipated Graduation: June, 2016
Major Focus in Digital Signal Processing
Current Cumulative GPA: 3.04

Burlington County College — Mount Laurel, NJ
Associate of Science in Engineering — Graduated: June, 2013
Cumulative GPA: 3.43

Honors

Dean's Scholarship, Drexel University, 2013-2014
Region 19 All-Academic Team - Golf - Burlington County College - Spring Semester, 2012

Skills

Computer: PSpice, MATLAB, Microsoft Office (Excel, Word, PowerPoint), AutoCAD
Equipment: Multi-meter, Oscilloscope, Waveform Generator
Electronic: Soldering, Wiring

Engineering Design Projects

- Designed, built, and coded an infant monitoring Arduino project which made use of nRF24L01 wireless module and a sound sensor for a micro-controllers course at Drexel University

Experience

AKF Group — Princeton, NJ
Electrical Design Junior Engineer — March 2015 - September 2015

- Assisted senior engineers with developing design/construction documents through the use of AutoCAD
- Performed site surveys to document existing conditions and determine project feasibility
- Performed load calculations for lighting, power, motor control, and fire protection circuitry

United States Navy — San Diego, California
Aviation Electricians Mate — Oct, 2007 to June 2009
Troubleshooting and maintenance of Sikorsky MH-60S helicopter electrical systems

Relevant Coursework

Engineering Lab I, II, III	Electronic Devices	Digital Logic Design
Electromagnetic Fields and Waves	Analog and Digital Communication	Programming for Engineers
Transform Methods and Filtering I, II	Wireless and Cellular Communication	Circuit Analysis

Anthony J. Schmidt
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Education

Drexel University — Philadelphia, PA
Bachelor of Science in Electrical Engineering — Anticipated Graduation: June 2016
Cumulative GPA: 3.33

Honors and Awards

Dean's List, Drexel University, Summer 2014

Skills

Programming Languages: HTML, CSS, MySQL, MATLAB, Java, PHP
Operating Systems: OS X, Windows, Linux, iOS, Android
Software: PSpice, Creo Parametric, AutoCAD, MATLAB, Adobe Photoshop, Microsoft Office Suite, PSoC Creator, WordPress
Machine: Multimeter, Oscilloscope, Soldering

AcceleRevolution

- Designed game similar to Dance Dance Revolution using accelerometer and MATLAB
- Created enhanced GUI by importing graphics produced in Photoshop
- Overcame obstacle of polling for accelerometer direction while simultaneously keeping game time synchronized

Warner Piano Website Design

- Developed master business plan to create online marketing presence
- Assisted client in obtaining logo that properly conveyed brand values
- Created modern website to successfully drive more traffic into client's store (http://www.warnerpiano.com/)

Experience

Lockheed Martin — Moorestown, NJ
Software/Systems Engineer — March 2015 - Current
- Developed Software Requirements Specification for new OASIS Simulator features
- Created UML Diagrams in Rhapsody
- Debugged and Resolved existing issues with OASIS Simulator
- Added new features to OASIS Simulator

Apple Inc. — Marlton, NJ
Family Room Specialist — January 2012 – August 2012
- Managed time efficiently to provide support for multiple customers simultaneously
- Diagnosed customers' problems; performed software fixes and repaired/replaced hardware when necessary

Matt Robinson Electrical Contracting — Marlton, NJ
Electrical Apprentice — June 2009 – August 2009
- Performed multiple technical tasks related to residential and commercial electrical work
- Installed and replaced light fixtures, relocated circuit breakers, replaced attic fans, installed remote-controlled blinds

Relevant Coursework

Content Management Systems	Digital Logic Design	Electric Circuits
Design with Microcontrollers	Electric Motor Control Principles	Electronic Devices
Transform Methods & Filtering I & II	Evaluation & Presentation of Data I & II	Engineering Lab I & II

Activities

Member, IEEE, Drexel University, 2014 to Present
Member, IEEE, Georgia Tech, 2012 to 2013
Pianist, 2009 to Present

Kenneth Hale, Jr.

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Education

Drexel University — Philadelphia, PA
Bachelor of Science in Electrical Engineering — Anticipated Graduation: June 2016
Cumulative GPA: 3.85

Camden County College — Blackwood, NJ
Associate of Science in Engineering Science — Graduated: June 2013
Associate of Science in Mathematics — Cumulative GPA: 3.79

Honors

Dean's List, Drexel University, Winter Quarter 2013 - Present
Dean's Scholarship, Drexel University, 2013 - 2015
New Jersey STARS, State of New Jersey 2010 - 2013

Skills

Computer: Altium Designer, MATLAB, Microsoft Office (Excel, Word, PowerPoint, Visio), Java, C++, PSpice, AutoCAD, PVCS, SmarTeam, DocRevs

Machine: Modular Impulse Generator, Coupling Transformer, Spectrum Analyzer, Digital Multimeter, Solder Station / Microscope, Waveform Generator, Voltage & Current Generators, Environmental & Temperature Chambers, Oscilloscope, Various Probes

Relevant Coursework

Wireless Communications
Solar Energy Engineering
Micro-Controllers
Analog and Digital Communications
Electromagnetic Fields & Waves
Electrical Computer Engineering Laboratory I - IV

Engineering Design Project

- Built bluetooth controlled, autonomous Arduino robot
- Designed structure to optimize robot mobility through research into different patterns of pin configuration
- Integrated several remote monitoring sensors and coded Arduino to utilize sensors for navigation
- Demonstrated final product in video (https://www.youtube.com/watch?v=agIDP063bQg)

Experience

AMETEK Aerospace & Defense — Harleysville, PA
Co-op (March 2015 - Sept 2015) / Part Time (Sept 2015 - Present) — March 2015 - Present

- Design, layout and assemble PCB's using Altium Designer
- Perform ATP's and FTP's on test articles to ensure EUT is functional.
- Conduct qualification tests (Temperature, Humidity, Lightning) per RTCA DO-160G
- Complete EMI tests (RE & CE) using spectrum analyzer and AR software
- Supervise CAD personnel updating configuration controlled documents
- Find replacements for obsolete parts and update drawings using CAD and WORD
- Write engineering change notices (ECN's) utilizing SmarTeam and DocRevs

Activities

Member, Institute of Electrical and Electronics Engineers, Drexel University, 2014 to Present

Brett Reich

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Education:

Drexel University — Philadelphia, PA
Bachelor of Science in Computer and Electrical Engineering — Anticipated Graduation: June 2016
Cumulative GPA: 3.59

Burlington County College — Mount Laurel, NJ
Associate of Science in Engineering Science — August 2011 to June 2013
Cumulative GPA: 3.756

Honors

- Dean's List, Drexel University, 2014
- Dragon Alumni Scholarship, Drexel University, 2013
- Phi Theta Kappa Honors, Burlington County College, 2013
- Dietrich Botstiber Foundation Award, 2011
- Engineering Award, PSPE-Valley Forge Chapter, 2011
- Dean's Scholarship, Drexel University, 2013 to Present
- Drexel Legacy Scholarship, Drexel University, 2013
- Dean's List, Burlington County College, 2011-2013
- Honorable Mention, United States Army Award, 2011

Skills

Programming Languages: Bash, C/C++, Java, Python, VHDL
Operating Systems: Linux, Windows, Oracle Virtual Machine
Software: PSpice, MATLAB, Microsoft Office (Excel, Word, PowerPoint)
Machine Skills: Multimeter, Oscilloscope, Soldering

Relevant Coursework

Computer Architecture Design	Transform Methods I, II	Design with Microcontrollers
Analog and Digital Communication	Embedded Systems	Introduction to Computer Networks

Electrical and Computer Engineering Laboratory I, II, III

Design with Microcontrollers Final Project

- Designed system using miniature motorboat on fixed course, controlled its movements, and timed lap times while varying hull vibration frequency with two types of frequency generators
- Improved earlier science fair experiment which evaluating hypothesis that muscle vibrations in mammals potentially reduction water resistance completed
- Demonstrated efficient embedded microcontroller code which simultaneously took data measurements, and drove output motor control while two frequencies were being actively generated from commands sent over a USB-serial Interface from a user GUI
- <https://www.cs.drexel.edu/~br382/index.html>

Experimental Areonotical Science Fair Design

- Created innovative design for blimps that improved ability to adjust altitude while potentially increasing cost-effectiveness
- Researched and utilized ideal gas law to build working model using compressed gas to maintain life while minimizing waste
- Developed protocol to ensure precise measurements of small differences in weight and pressure
- Presented to professional engineers and interested visitors; placed First in the Delaware Valley Science Fair for Engineering

Experience

Rite Aid Coperation — Medford, NJ
Pharmasutical Technician — January 2012 to Present

- Communicate with medical professionals and resolve problems with doctor prescriptions
- Resolve billing issues With insurance corporations; maintain confidentiality of patient information (HIPPA Regulations)

Activities

State Certified Pharmacy Technician, Certification# 28RW01945800