

CHRISTOPHER GOOD

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WORK EXPERIENCE

Textron/AAI Corporation, Hunt Valley, MD

Principal Systems Engineer, 2008 to present

Systems Engineer IV, 2001 to 2008

Test and Integration Lead and Lead Avionics Engineer for Tactical Unmanned Aerial Vehicle (TUAV), Shadow 200

- **Ground and flight testing**
 - Shadow 200, Shadow M, Shadow M2 - engineering, qualification, and production acceptance testing of complete system
 - Flight test director, senior flight test engineer, hardware and software integration lead for over 30 Shadow UAV flight test series in the U.S. and abroad, resulting in sales to the U.S. military and foreign countries with production value of over \$1B
 - Responsible for ground and flight test definition, structure, and execution
 - Lead for test planning for proposals that won US and foreign sales of Shadow, Future Combat Systems III, and Warrior (Army ERMP)
 - Routinely requested by name from US Army Unmanned Systems Program Office to lead flight tests
- **Hardware and software design and implementation**
 - Subject matter expert for three successive generations of Shadow avionics, SAASM GPS, Hardware In the Loop Simulation (HILSIM), payload simulation, aeronautical models, automated takeoff and landing systems – both GPS and radar based
 - Develop flight, simulation, and data reduction software with automated analysis, hardware design, and system interfaces
 - Integration lead for new system development and existing system improvements
 - Develop hardware and software roadmaps for system integration
 - Sole developer of IAI POP 200/300/300D (EO/IR/laser designator) payload simulation
 - Senior software engineer and system architect for Shadow 200 HILSIM that allows AAI to fly the aircraft on the ground, using a proven 6-degree of freedom (6-DOF) simulator and a real-time digital signal processing hardware interface for all avionics input/output, incorporating all components of the Shadow 200 system, allowing for complete test of all interfaces and communications links with the actual air vehicle in flight mode
- **Management**
 - Ground and flight test integration management of personnel and resources for all aspects of Shadow development
 - Management of the flight line, as test director, and lab assets and personnel, as ground integration and test lead
 - Manage up to 30 engineers, technicians, and operators for assignments and execution of test series
- **Training**
 - Recognized the need for engineers to be trained on the entire system, instead of just one specific area
 - Build and conduct training classes that are well attended for all engineering staff
 - Classes include avionics overviews and details, simulation training, flight data reduction and analysis
- AAI Interface/Advisor to FAA for unmanned system certification in national airspace
- Researched, built, and presented documentation to US Air Force GPS Directorate for successful approval of SAASM integration to Shadow system
- Delivered HILSIM presentation at Huntsville Simulation Conference, October 2003
- Promoted within company because of demonstrated test knowledge and leadership, and recognized technical subject matter expert on air vehicle hardware and software, and radar automated landing system

US Air Force Officer, July 1989 – 2001

Air Force Information Warfare Center, Detachment 1 (Ft Meade, Maryland), Sep 1997 to June 2001

- Primary Air Force Computer Scientist in the Information Operations Technology Center
- Chief, Toolbox Readiness Team – Manager and lead technical support for directorate level database development program
- Manager, lead programmer, and system architect for modeling and simulation effort. Application software consisted of > 30,000 lines of C/C++ code using Microsoft Visual C/C++ w/ MFC
- **Briefed this national level modeling and simulation effort directly to U.S. Vice President Cheney, Director of Central Intelligence, Assistant Secretary of Defense, SPACECOM CINC, two Directors of the National Security Agency**

Air Force Flight Test Center, Detachment 3 (Nevada), July 1993 to Aug 1997

- Applications programmer/systems analyst with Applications Software Division – real-time data gathering systems, post-missions data reduction systems
- Chief, Applications Software Division – Directed efforts of 10 application programmers; manager and technical lead for three-year post mission data reduction applications development program; responsible for new system development and legacy system maintenance
- Chief, Systems Management Division – Hired and directed efforts of 10 system managers; responsible for maintenance and upgrades for all systems; head of flight test support on 24/7 basis

Foreign Technology Division, National Air Intelligence Center (Ohio), Feb 1990 to June 1993

- Applications programmer/systems analyst with Applications Systems Division
- Wrote custom timeline & event graphical database applications, DTED/line-of-sight applications & satellite ephemeris computational applications. Responsible for center-wide geographic information systems (GIS) upgrades & new application integration and training. Integrated data from ARCINFO/ARCVIEW (GIS), Digital Chart of the World (GIS), Oilstock (satellite information / GIS), Galactan (satellite information)

EDUCATION

United States Air Force Academy, Colorado Springs, CO
B.S., Computer Science, May 1989

University of Nevada, Las Vegas

Candidate for M.S., Mechanical Engineering, (2 classes left), Dynamic Systems and Controls Options
Project: 16-foot wingspan Unmanned Aerial Vehicle consisting of airframe and airfoil design and construction, flight computer design and integration, flight sensor hardware design and construction, flight sensor to computer design and interface, and flight and ground software development

Johns Hopkins University, Baltimore, MD
Master's level computer engineering classes

PROGRAMMING LANGUAGES AND COMPUTER SYSTEMS

C/C++, Pascal, PICBASIC, Fortran 66/77/90, ADA, BASIC, PL1
PC, LINUX, SUN, SGI, IBM, VAX (DEC)

PERSONAL INTERESTS AND SKILLS

Licensed private pilot
Design, build, and fly remote control aircraft (fixed wing, helicopter, multi-copter) for 25+ years
Aerial photography, hiking, and camping

SECURITY CLEARANCE

Secret - Active; Top Secret SCI/SBI - Inactive