# Edward P. Sivick

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A performance driven engineer having a wide range of experience in the military and private sectors. Developed products and systems from concept to final production with an interest in software development opportunities.

Skills

- HTML, CSS, JavaScript
- Mechanical engineering
- SolidWorks / Simulation
- CircuitWorks

- SolidWorks PhotoView 360
- GD&T / MIL-STD Practices
- Project Management
- PTC Windchill / EnterprisePDM ASME Cert. / Compliance
  - Bid/Proposal Development
  - AutoCAD / Pro E Design
  - LabView Programming

**Education:** Bachelor of Science, Mechanical Engineering, University of Pittsburgh

- The George Washington University: Full Stack Web Developer Program
- Udacity: Introduction to Programming Nanodegree languages: HTML, CSS, Python, JavaScript

## **Work Experience:**

#### Web Dev Contractor / K12 Instruct, Herndon, VA

#### July 2015 – Present

- Developed and revised content files for website affiliated with Archdiocese of Baltimore using HTML, CSS, and JavaScript languages
- Collaborated with team members to ensure successful testing and implementation in a timely manner
- Maintained the database of website related files to safeguard the revision control of content
- Assisted students through the instruct /monitor of high school curriculum from K12 Int. Academy

## Digital Signal Corp, Chantilly, VA

May 2013 – July 2015

Designer / Producer / Installer of Facial Recognition and Biometric Systems

## Senior Mechanical Design Engineer

- Mechanical Lead that designed components and mechanisms for several facial and biometric systems, including various electronic enclosure sub-assemblies using SolidWorks / CircuitWorks
- Improved existing system designs to enhance aesthetics, and comply with non-destructive tests
- Assisted Assembly and Quality Techs. to promptly solve component design issues on the Mfr. floor
- Created rendered images of final products for Sales / Marketing teams using PhotoView 360
- Worked with Field Service Techs. assuring systems were properly installed to custom design mounts

## Self-Employed, Herndon, VA

Jan 2012 – May 2013

# Mechanical Design & fabrication of commercial products

- Acquired funding to design, fabricate, and field test four consumer products for Production
- Pursued licensing and royalty agreements with several product manufacturers

# Northrop Grumman IS, Chantilly, VA

May 2005 - Jan 2012

Designer / Producer / Integrator of Intelligence and Surveillance Systems

Clearance: Top Secret / SCI, Department of Defense

## Mechanical Engineer IV

- Designed specialized mechanical components for custom Electronic Systems that were utilized as part of payload assemblies in various aircraft and ground based systems
- Utilized specific design tools such as AutoCad Mechanical Desktop, Inventor, SolidWorks, and Simulation to analyze the integrity of fabricated parts
- Generated Technical Data Packages for systems consisting of Fabrication Drawings, Cable Assemblies, Parts Lists, and Wire Diagrams based on ASME standards and contract requirements
- Created project material cost and updated schedule reports to assure tasks were completed within budget and on time
- Consulted with vendors to assure that COTS or fabricated parts met the system design requirements

Received the IT President's Excellence Award in the Innovation and Technology category, and two Special Achievement Awards for exceptional performance, teamwork, and contribution on projects

## Mantech Test Systems, Chantilly, VA

Jul 1999 - Apr 2005

Designer / Producer / Integrator of Automated Test Equipment for printed circuit boards

Clearance: Secret / Department of Defense Staff Engineer / Mechanical Design

- Designed and developed systems for the following clients:
  - U.S. Army Firefinder, Redstone Arsenal, AL
  - U.S. Marine Corps Firefinder, Seal Beach, CA
  - U.S. Navy APG-65 Fleet Support, Lakehurst, NJ
  - U.S. Air Force LANTIRN, Albany, GA
- Tyndall Air Force Base, HMC-193
- U.S. Marine Corps TETS, TOW, EOV
- Royal Australian Navy
- GA Canadian Air Force
- Designed Interface Device hardware to accommodate numerous circuit card assemblies and test equipment while following configuration management procedures
- Led the Design team on the research and development of Test Program Hardware (TPH) to ISO 9001 and military standards
- Interacted with clients to assure that preliminary and critical design models satisfied program specification requirements for the development of First Article Test (FAT) components
- Inspected client work sites to evaluate existing program operations and any anticipated effects they had on the performance of new program designs or modifications
- Prepared Time and Labor analysis for military and commercial client proposals
- Trained personnel on the proper methods of completing design tasks from concept to production
- Consulted with vendors to assure design specifications and standards were met and that the products were inspected and delivered on schedule
- Coordinated efforts with the Quality Assurance team to evaluate product discrepancies and the corrective action process to "Use As Is" or modify to eliminate project schedule conflicts
- Corrected several projects that had fallen behind deadlines by quickly identifying problems and providing engineering solutions
- Received numerous Performance Incentive Awards for efforts in completing project tasks

## Design Integrated Technology, Inc. Warrenton, VA

Feb 1992 - Jul 1999

DuPont

Johnson & Johnson

Pharma BioTech

- Smith+Nephew

- Davis & Geck

Designer / Developer of industrial test equipment and data acquisition systems

## Mechanical / Software Engineer

- Designed and developed systems for the following clients:
  - NASA Advanced Solid Rocket Motor Project
  - Hill Air Force Base Propellant Analysis Center
  - Lawrence Livermore National Laboratories
  - U.S. Surgical Corp.
  - Ukraine Government Pavlograd Chemical Plant
  - Indian Head Naval Surface Warfare Center
- Prepared structural and cost analyses for contract proposals
- Managed and updated client project progress databases
- Installed systems at customer sites, and conducted equipment/software operation training
- Directed all aspects of fabrication and certification of pressure vessels to assure ASME approval
- Created designs and layouts for product fabrication
- Developed stress calculation programs that evaluated the structural adequacy of pressure vessels
- Successfully designed, developed, and installed data acquisition programs using LabView software at the following organizations: Pavlograd Chemical Plant, Hill Air Force Base Propellant Analysis Center, DuPont, Lawrence Livermore National Laboratories, Numerous pharmaceutical companies
- Upgraded the PC control systems of former customers by utilizing more advanced and current hardware/software tools. Customer feedback was utilized to define the critical areas of improvement such as: UI development, PC control, data representation, and Y2K compliance