

# ***Edward P. Sivick***

13432 Muirkirk Lane  
Oak Hill, VA 20171

Cell: (703) 926-6083  
Email:ed@sivick.net

---

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
  - PTC Windchill / EnterprisePDM
  - SolidWorks PhotoView 360
  - GD&T / MIL-STD Practices
  - Project Management
  - 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 - languages: HTML, CSS, JavaScript, Web APIs, Node.js, MySQL
- 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, EOVS
  - Royal Australian Navy
  - 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**

*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
  - Johnson & Johnson
  - Pharma BioTech
  - Smith+Nephew
  - DuPont
  - Davis & Geck
- 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