OVERVIEW

I have worked throughout my career as an engineer looking for large multifaceted problems in the hardware, software, manufacturing, and information technology. I enjoy working on large problems and projects that I can use my technical and engineering expertise to help solve issues or efficiently complete the project. I learn the systems, hardware, software, processes, issues, and problems completely, create a plan / roadmap, present my recommendations, and implement solutions. I follow a 3-fold method using “The Triangle” and balance Cost, Customer, and Brand to maximize each for both the business and the customer.

TECHNICAL SUMMARY - EXAMPLES

|  |  |
| --- | --- |
| Hardware, Test, & Design Tools | PSpice, SPICE, Vector Network Analyzer, Spectrum Analyzer, Power Meter, Signal Generator, Oscilloscope, Lab View, Test Stand, Eagle, CAD, RevIT, TeamCenter, Ration Clearcase & Clearquest, FPGA modeling, SDR and waveforms |
| Programming Languages | C, C#, C++, Java, Java Script, Visual Basic, VB Script, Lab View, Test Stand, Intel Assembly, HTML, CSS, ASP, ASP.NET, PHP, MS SQL, MySQL, Android, iPhone, Perl, .NET, Python, SSIS, SSRS, SSMS, PowerShell, BASH and more. |
| IT Platforms | Active Directory, IIS, Apache, MS SQL, MySQL, Exchange, Windows, Windows Server, Linux, Azure, DevOps, Agile, Scrum, Git, Github, and more. |
| Software | Microsoft Windows, Microsoft Windows Server, Microsoft Exchange, Microsoft SQL, Microsoft IIS, Microsoft Office, Microsoft Visio, Microsoft Project, Microsoft Visual Studio, Microsoft Access, Mathworks Matlab, Maplesoft Maple, Mathsoft MathCad, Orcad PSpice, Adobe Illustrator, Adobe Photoshop, Adobe Dreamweaver. TeamCenter, Rational Clearcase, & Clearquest, Solumina Orion, Solumina G7, Oracle CRM, and more. |
| Methodologies & Regulations | Six Sigma, Software Development Life Cycle, IEEE, ISO 9001, CM2, Agile, DevOps, Scrum, TeamCenter |

PROFESSIONAL EXPERIENCE – TIMELINE & EXAMPLES

**Humana Pharmacy Engineering – Tempe, Arizona 01/2016 to Present**

**Systems / Software Engineer Senior Lead – Technical Stakeholder Shipping 01.2017 to Present**

*Technical Stakeholder for all Mail-Order Pharmacy Lines, which ship approximately 150,000 packages every day (~$250 million yearly in cost)*

* Working with only myself as technical stakeholder and 1 other as business side stakeholder I implemented a unification project to make all 6 lines working on the same technology core and standards, using C#, C++, MS SQL, SSIS, SSRS, Symmetric DS, PowerShell, Python, and more
  + This Project took about a year and resulted in being able to maintain and change the system much faster and adjust to changes quickly
* After implementing the unification project, I implemented many cost saving measures, some of which are as follows:

|  |  |  |
| --- | --- | --- |
| Project | Description | Cost Savings |
| USPS  PMOD Expansion | Technical Sorting of the packages from 250 sort points to 500 sort points based on moving average volume. | 4.5 million a year in shipping costs. |
| USPS  Parcel Select Upgrade | Add in Parcel Select (PS) for over a pound packages to use the Priority Mail Open & Deliver (PMOD) system instead of Priority Mail (PM) or First Class (FC) | 2 million a year in shipping costs. |

* Designed and implemented 2 high speed package sorting machines using advance robotics, PLC, and microcontrollers which allowed us to sort 9000 packages per hour without user intervention.
  + The sortation robotics cost approximately 1.5 million dollars each with parts and labour and save approximately 4 million per year each.

**Systems / Software Engineer Senior Lead – Robotics and Engineering Pharmacy 01.2016 to 01.2017**

*Lead Systems Engineer for 6 high performance automated Mail-Order Pharmacy Production Lines, which produced over 200,000 prescriptions from start to finish per day, every day.*

* Helped to implement a technology refresh on one of the Arizona mail order pharmacy lines with minimal downtime to Operations resulting in savings of time overall by 20% for the operations team.
* Lead the project to implement cold medicine dispensing in the main Arizona line, which allowed a backup of the Ohio system.
* Learned the technical side of shipping, sorting, and verification of all shipments on all six lines. Became the Technical Stakeholder of Shipping for all of Humana Pharmacy.

**General Dynamics C4 Systems – Scottsdale, Arizona 06.2007 to 08.2014**

**Electrical Engineer Senior – R&D and Test Engineer Board Development & Test - Nasa, FBI, CIA, FAA 05.2011 to 08.2014**

*Lead Test Engineer for multiple projects at board level development and production test.*

* Helped to develop and debug multiple project boards and develop functional tests as well as maintain testing environment throughout production
* Developed test procedures and test fixtures to fully exercise all production boards.
* Created software to automate the test procedures for full rate production on multiple projects.
* Designed and implemented multiple fixtures and In-Circuit Test (ICT) fixtures and programming.
* Designed and implemented a database to store and retrieve test data records company wide as well as give business analytics for the test data in real time.
* Designed and a 2 in one cell phone on a single board for clear and secret encrypted communication on the same device.

**Electrical Engineer II – Lead Factory Production & Test Engineer - Rescue 21, Nasa, FBI, CIA 09.2008 to 05.2011**

*Unit Configuration & System Integration and Test on all Rescue 21 project assets of the United States Coast Guard.*

* Completely redesigned the Factory processes and test procedures from the ground up to exercise every path in the system and all RF specifications reducing defects by 75%
* RF testing and radio setup to reduce loss and increase performance well within specifications
* System wide testing as well as unit testing successfully on schedule and under budget
* Lead team of 6 technicians and one engineer to ensure timely shipment of crucial assets to the field
* Responsible for budget, project management, time reporting, estimated costs, proposals, and earned value
* Responsible for all Operational changes and assignments, that impacted change to the As Designed Product. Signature Authority for Operations/Manufacturing on the Change Control Board
* Created the Production Acceptance Testing documentation for the Internal Wireless Network (IWN)

**Electrical Engineer I – Regional Site Acceptance Testing Team Engineer - Rescue 21 06/2007 to 09/2008**

*System Integration and Test on all Rescue 21 project assets of the United States Coast Guard.*

* Redeveloped the System Integration and Test procedure with new tests to tune and exercise the system and a new format to increase efficiency
* Redeveloped the process flow with all checks and balances from the time an asset was delivered to the field from the factory until it was sold to the customer
* Performed system testing of the whole system as well as RF testing, filtering and radio tuning on schedule and under budget

**Arizona State University – Business Information Technology – Tempe, Arizona 07/2003 to 11/2004**

**Network Engineer – Active Directory Migration Project**

*Accountable for the Security and Groups of the Arizona State University Active Directory Migration Project.*

* Coordinated the groups and security segment of the Active Directory Migration Project for over 8000 objects
* Provided user account support in the environment during the migration
* Participated in developing the new user account web site and SQL database

EDUCATION

**MS Electrical Engineering (MSEE), Arizona State University – Tempe, Arizona 2013**

|  |  |
| --- | --- |
| Emphasis | Signals Processing and Communications |
| Projects | Digital Processing in Video Conversion, Random Signal Theory Research in Low Power Signals, Laser Theory in the World |

**BS Electrical Engineering (BSEE), Arizona State University – Tempe, Arizona 2007**

|  |  |
| --- | --- |
| Emphasis | Electromagnetics, Power, and Nuclear Power |
| Senior Project | Uncooled infrared detector using Micro-Electro-Mechanical Systems |
| Awards | Awarded first place and $2000 in the TI Analog Device Competition |

CERTIFICATIONS & CLEARANCES

|  |  |
| --- | --- |
| Certifications | Cisco Certified Network Associate (CCNA)  Microsoft Certified Systems Engineer (MCSE)  A+ Certification  Azure DevOps – Agile Scrum |
| Clearances | Secret Level with the Department of Defense (previous)  Top Secret Level with the Department of Justice (previous) |

FINAL

I originally went to college for Computer Science for 3.5 years before switching to Electrical Engineering because I wanted to do both Hardware and Software. I received my BS and MS in Electrical Engineering and then worked in mostly Electrical Engineering with radios for the Coast Guard, Army, FBI, CIA, NASA. I then switched to R&D doing both hardware and software to develop experimental technology in cellular, radio, encryption, direction finding, and GPS. I moved on from R&D to get into robotics and automation using PLC and custom C#, SQL, C++ code on custom developed hardware and robotics. Finally, I got into large scale logistics automation with robotics hardware and software. I am considered by most I work with as a Jack of all Trades that has a wide breadth of knowledge along with a lot of depth.

I am a self-starter and love learning engineering that I don’t already know. I look forward to speaking with you in person or on the phone.

REFERENCES

Available upon request please see my linked in page: <http://www.linkedin.com/in/scottbartuska>