# William W. Stuck II

Phone: (615) 509-3503 Email: Bill@wws2.net

### PROFESSIONAL EXPERIENCE:

Consulting / Dassault Systèmes – Nashville, TN (Remote)

2024 - Current

# Wiring Harness Design 3DEXSPERIANCE Solutions Architect

- Harness design and layout per SAE-AS50881 Specification Wiring, Aerospace Vehicle
- Setup, Testing and Validation of 3DEXPERIENCE 2D System Wiring Design Environment
- Logical to Physical Data Setup and Migration using Systems Design software
- Setup, Testing and Validation of 3DEXPERIENCE 3D Harness Design Environment
- Development and Implementation of Custom 3D and 2D Electrical Parts and Symbols
- Development of Harness Design Use Case Demonstrations and Training
- User Training and Development for Best Practice Design and Data Management
- Data Setup, Data Creation, Data Configuration, Data Modification

Lockheed Martin - Space, Huntsville, AL (Remote)

2019 - RIF 7/2024

## **Sr Electrical Design Engineer - Harness Design Solutions Architect**

- Primary Liaison Engineer for prototype designs and manufacturing support of new concept designs
- Primary Engineer for new part selection related to box wiring, harness wiring and cable design
- 3D modeling and 3D printing of mechanical and electrical test parts for advanced prototype designs
- Lead Integration and Harness Designer for (THAAD) Terminal High Altitude Area Defense Program
- Harness design and layout per SAE-AS50881 Specification Wiring, Aerospace Vehicle
- Project Management of engineering designs using (PLM) Product Lifecycle Management software

Design Ability Inc. & LLC, Brentwood, TN

2012 - 2019

### Mechanical / Electrical Design Engineer / Prototype Fabricator

- Design state of the art joystick controlled 4x4 side-by-side vehicles for individuals with disabilities
- Design control automation using motor controls, feedback loops, gear motors and actuators
- Design heads-up display / control systems for full vehicle automation with single joystick interface
- 3D design and layout of parts and assemblies used for 2D drawings and instruction sheets
- Prototype and fabrication of adaptive recreational vehicles for individuals with disabilities
- Installation of software and firmware updates to support various control units
- Roboteq Motion Control Solutions Partner for custom motion control design applications

Sikorsky Aircraft, CT – AL – NY

2005 - 2012

#### Staff Electrical Design Engineer

- Lead Component Integration and Harness Designer for advanced Military Helicopter Modifications
- Harness design and layout per Mil-W-5088 Military Specification Wiring, Aerospace Vehicle
- Liaison Engineer responsible for design and shop support during helicopter manufacturing process
- Prototype development testing and documentation for Catia V5 productivity tool enhancements
- 3D Harness Design using Catia V5 (EHI & EWR) Harness Installation & Wire Routing software
- Complete Harness Tooling Design using Catia V5 (EHF) Electrical Harness Flattening software
- Catia V5 Trainer for Harness Design and Harness Installation, both In-house and Contract offices
- Lead on Sikorsky's ACE LEAN / 6S Charter Team for Catia V5 Machine Performance and upgrades
- Project Management of engineering design work using MatrixOne and Enovia PDM software

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## **PROFESSIONAL EXPERIENCE: Continued**

Country Life Tech, Troy, MO

2000 - 2005

### **Computer Network Manager / Owner**

- Develop Windows 2003 Exchange Server and created proxy-internet access, FTP/Web Sites
- Set-up and management of VPN/Dial-up connections for multiple office and user locations
- Set-up, management, and administration multi-site AutoCAD system for design and 2D drawings
- Set-up, management, and administration of multi-site AutoCAD large format plotting systems

SFRN, West Palm Beach, FL

1995 - 2000

### **GIS / Computer Manager**

- Design, develop, and operate multi-staged GIS projects and standardized software training
- Maintain relationships between Engineers and Clients during project development
- Create complete BID Specs for computer related projects
- Project Management of computer hardware and software projects
- Set-up and development of AutoCAD system for design and 2D drawings

Sikorsky Aircraft, Stratford, CT

1991 - 1995

# **Manufacturing Engineer**

- Development and Implantation of prototype laser alignment tool for advanced aircraft manufacturing
- Harness Installation Design per Mil-W-5088 Military Specification Wiring, Aerospace Vehicle
- Liaison between the Design Engineering and Manufacturing for US Military Helicopter builds
- Wiring harness fabrication, manufacturing, and buildup instructions of US Military Helicopters
- Avionic box layout and installation instructions for US Military Helicopters
- Wiring harness layout and installation instructions for US Military Helicopters

### **VOLUNTEER ACTIVITIES AND PROJECTS**

Over the last 15+ years I have used my skills volunteering thousands of hours designing, modifying, and fabricating adaptive items for individuals with severe disabilities. Anything from simple toys for kids to very labor-intensive adaptive joystick-controlled drive-by-wire 4x4 recreational vehicles. The satisfaction of helping individuals accomplish things otherwise not achievable is fun and rewarding. The smiles of joy and appreciation from the individuals and their families always make the effort worth the time. Some of the adaptive projects can be seen on the Design Ability Inc. – 501c3 Nonprofit website and YouTube channel at www.designabilityinc.com.

#### **EDUCATION:**

B.S. Business - Barry University, Miami, FL

A.S. Electrical Engineering - GNHS College, New Haven, CT

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### **SOFTWARE SKILLS:**

#### CAD / 3D Software:

- 3DEXPERIENCE Electrical 3D Part Design, Electrical 3D Design Configuration and Advanced Usage
- 3DEXPERIENCE Electrical Harness Design and Routing, Configuration and Advanced Usage
- 3DEXPERIENCE Electrical Manufacturing Preparation Configuration and Advanced Usage
- 3DEXPERIENCE Data Setup, Part Design, Assembly Design Configuration and Advanced Usage
- 3DEXPERIENCE Electrical background and experience are as follows.
  - Comfortable with Data Setup functions, Admin Setting Functions, Standard Part Creation for both Logical and Physical, Wiring Diagrams, Logical Harnesses, L2P process, Physical Harness Design and Routing, 3D Flattening and related Formboard drawing creation as well as Installation drawings.
- AutoCAD Installation, Setup, Configuration and Admin Advanced Usage
- Autodesk Inventor 3D Modeling, 2D Drawing General Usage
- Autodesk Fusion 360 3D Modeling General Usage
- Catia V5 3D Modeling, 3D Harness Design, 2D Drawing Configuration and Advanced Usage
- Catia V5 3D (EHI & EWR) Harness Install Design Configuration and Advanced Usage
- Catia V5 3D/2D (EHF) Electrical Harness Flattening Configuration and Advanced Usage
- Creo 7 3D Modeling Basic Usage
- Creo 7 2D Drawing General Usage
- SolidWorks 3D Modeling, 2D Drawing General Usage
- TinkerCAD 3D Modeling Advanced Usage

#### PLM (Product Lifecycle Management) Software:

- 3DEXPERIENCE Engineering PLM Software Supervisory and General Usage
- ENOVIA Engineering PLM Software Supervisory and General Usage
- EPDM Engineering PLM Software Supervisory and General Usage
- MatrixOne Engineering PLM Software Supervisory and General Usage
- Windchill Engineering PLM Software Supervisory and General Usage
- IMPACT II Sikorsky Aircraft's Engineering Software Supervisory and General Usage

#### **Automation Software:**

Roborun+ PC Utility v3.0 – RoboteQ Controller Software – Configuration and Advanced Usage

### **Microsoft Office:**

• Word, Excel, PowerPoint, Access - Advanced Usage

#### **MECHANICAL AND ELECTRICAL SKILLS:**

#### **BUILD AND FABRICATION:**

- Electrical Fabrication of Harnesses, Panel Boxes, Control Units, Etc.
- Motion Control of Open and Closed Loop Feedback Actuators, Motors, Servos, Etc.
- RC (Remote Control) System Fabrication of Steering, Braking and Power Systems, Etc.
- 3D printing of Spacers, Tools, Covers, Levers, Tooling Jigs, Gadgets, Etc.