Cell Phone: 864-247-5007

34 Alice Dr Sumter SC 29150

**David Lee Killough – Senior 3D Reality Capture & CAD/BIM Designer – Current Office Location: Work from Home**

Professional Years of Experience: **11 years** in a Design & Engineering Support role including

Computer Aided Drafting & Design, Computer Aided Manufacturing, Rapid Prototyping, Product Data Management and Teaching

EDUCATION: Associate in Applied Science, Engineering Graphics & Design Technology, Tri-County Technical College near Clemson University

NOTABLE SKILLS: Proficient with As-Built Incorporations and Procedures and any necessary, time sensitive, large volume issuance of Vendor Documents (image based or conversions).

Proficient with Reverse Engineering and Rapid Prototyping Software & Methods. Proficient in multiple CAD/CAM & Simulation software bundles: AutoCAD: 2D & 3D, Raster, Plant 3D, Inventor, Fusion 360, AutoDesk Recap & Recap Photo, MicroStation, Descartes, Navisworks Manage, Creo Parametric, SolidWorks, Solid Edge, Catia, Siemens NX, Revit, Tekla, Fusion P8 & other PDM Software; Adobe Pro, Bluebeam and Microsoft Office 365

SUMMARY: Mr. Killough was recently a Senior Designer in the Drafting Division at ENERCON’s office in Kennesaw, GA / (& Remote from Home). Mr. Killough supported the Energy Groups – Amazon Web Services Data Center Project from its start-up and into its expansion across multiple countries through continued collaboration and planning with AWS and its scheduled construction phases abroad. He recently supported the ANO CMG 2020-2022 Recovery Projects, having drafted, checked, quality reviewed, and signed off on more than 1,750+ Drawings since the beginning of 2020. ANO CMG is an extensive drawing As-Built project requiring the incorporation of complex, dated, and degraded image markups, some having five or more to incorporate for one drawing. Mr. Killough supported various groups within Enercon with sudden challenges to schedule deadlines and client requests ranging from 100 Plant 3D isometrics of a complex design nature in 3 weeks to meet an aggressive new outage schedule, to Plant 3D cross-design validations for a Chilled Water System design spec check, to client-acquisition Proposal Work & Project setup for design drawings and parametric models for test filters for new clients abroad, to assisting, maintaining, adapting and updating project CAD design files of Enercon’s Modular Racking System Design for AWS's additional sites abroad, to SNC Point Cloud & Model Verifications for a multitude of quick- pop FCRs for work in the field, to SU and AUX Transformer Point Cloud Design modeling within Plant 3D and Recap Pro for new Deluge and Fire Protection Systems for Ameren Callaway and Wolf Creek to AutoCAD Inventor Frame Generator Weldments for WRPS tank farm modifications and material removal. Mr. Killough also worked on Holtec’s Chiller demo / install RFI ECs for Holtec International, utilizing Recap Pro and Plant 3D to identify possible demo material

removal routes and future planned go/no-go install routes of the newly designed Chillers for the site. He recently assisted with initial Piping, Equipment, and Concrete (with rebar considerations) modeling within Creo Parametric for an SMR test reactor site (cannot disclose) using Creo’s Piping Module and Frame Module.

# CURRENT RECENT PROFESSIONAL EXPERIENCE

Mr. Killough has supported multiple Drafting Teams with questions on CAD software, drafting procedures & techniques, and any relevant new items of interest that can be learned and then taught to the team to increase the group’s knowledge and further production capabilities. In addition to his main AWS EG-DC assignment modeling parts and large-scale assemblies and generating authored parts and assemblies for BIM and RFA outputs into Revit and Plant 3D.

Mr. Killough has performed Drafting Portal work supporting Engineering’s needs for more than 500+ postings from 2020 thru 2024 for: Entergy - Arkansas Nuclear One, Grand Gulf, River Bend, Waterford; Nextera - Turkey Point, St. Lucie, Seabrook; Southern Company – Vogtle Electric Generating Plant; Southern Company – Hatch Nuclear Power Plant; TVA – Watts Bar; TVA – Sequoyah Nuclear Plant

Mr. Killough was requested to perform a Drawing Sample Audit for an ANO Site specific Analysis of As-Built Incorporations and procedural adherence.

Mr. Killough was requested and performed Quality Proposal Drafting and Layout work-support for

Enercon’s Engineering Group relating to future potential clients abroad.

Additional sudden and repeat drafting & design support work supplied for Enercon’s EFS Group Projects covering: Battelle Energy Alliance LLC; Mid-America Conversion Services LLC; Mission Support and Test Services LLC; URS | CH2M Oak Ridge LLC; & Savannah River Nuclear Site

Additional sudden and repeat drafting & design support work supplied for Enercon’s NSG Group Projects covering: American Electric Power – DC Cook; DTE Energy – Fermi 2; EDF “Electricite de France”; Luminant – Comanche Peak Nuclear; Callaway Nuclear Generating Station – Callaway Energy Center; Wolf Creek Generating Station

Each of these Job ID Postings throughout the year included at least: Electrical Elementary Diagrams, Equipment Layouts, Connection & Wiring Diagrams, Grounding, Raceway Layouts, Lighting Schematics, Logic Diagrams, Flow Diagrams, Bill of Materials, P&ID’s, Isometrics, Structural Steel Details, Fabrication Drawings, and massive amounts of Vendor-Issue Documents for several sites.

# PREVIOUS PROFESSIONAL EXPERIENCE

**ENERCON SERVICES INC (December 2019 thru March 2025) – See Summary Above for Detailed Job Information**

**POWER SYSTEMS SENTINEL TECHNOLOGIES (November 2017 thru October 2019) –**

**RAPID PROTOTYPE & REVERSE ENGINEERING DESIGNER**

Before joining ENERCON, Mr. Killough worked as a Designer and Support Specialist at Power System Sentinel Technologies. In this position, he served as a Reverse Engineer/Designer responsible for the design and rapid prototyping of parts for Engineering and Management by programming and using industry-leading software to additively manufacture and/or machine complex parts. He utilized and assisted with several software packages (MicroStation/Promis.e/Adobe Pro/AutoCAD 2017/Eiger 3D Printer Software/EX Scan Pro 3D Scanner Software/Fusion 360/SolidWorks/Solid Edge/OpenKM) to support Engineering and CADD personnel in completing scheduled task activities while also assisting with Project Management, Document Control & company-wide productivity gains. He assisted CADD personnel and Engineers with technical questions while reviewing, preparing, validating, and processing documents within PSStech's software systems. He also helped with software & process considerations with multiple Responsible Engineers across multiple projects at one time.

Example projects worked on during this time included:

* Open Phase Protection System – Electrical Elementary Diagrams, Equipment Layouts, Connection & Wiring Diagrams, Bill of Materials.
* Reverse, Design & Rapid Prototype of Exhaust Port Connections for Engine Blocks. (3D carbon fiber composite prototypes and then a series of final 17-4 PH stainless-steel printed parts)
* Reverse, Design & Rapid Prototype for Taper Attachment and other attachment types for Lathe and Mill Equipment. (3D carbon fiber composite prints, and 5-Axis Universal Machining Center one-offs)
* Reverse, Design & Rapid Prototype of parts for drones. (3D carbon fiber composite prints and 17-4PH Steel prints, and 5-Axis Universal Machining Center one-offs)
* Design Custom Fixturing and other Equipment to fit the needs of components to be machined. (3D carbon fiber composite prints and 17-4PH Steel prints, and 5-Axis Universal Machining Center one-offs)
* Reverse, Design & Rapid Prototype of Custom Fasteners and Control Boxes for wiring systems in a Drag Racer. (3D carbon fiber composite prints and 17-4PH Steel prints, and 5- Axis Universal Machining Center one-offs)
* Reverse, Design & Rapid Prototype of handheld boxes for Battery Powered Notch Filters. (3D carbon fiber composite prints, and 5-Axis Universal Machining Center one-offs)

During this time, Mr. Killough operated various machines to complete his tasks, including Shining 3D EinScan Pro 2X Rapid & High-Definition Scanner, Mark Forged X7 – Composite 3D Printer, Mark Forged Metal X – Metal 3D Printer w/Wash Station & Sintering Furnace, and a Haas UMC750SS (5-Axis Universal Machining Center).

**DUKE ENERGY – OCONEE NUCLEAR STATION (November 2014 thru October 2017) –**

**DESIGNER & SUPPORT SPECIALIST**

For three years prior to this, Mr. Killough worked as a Designer and Support Specialist at Duke Energy’s Oconee Nuclear Station. In this role he used and assisted with several (Microstation, AutoCAD, SolidWorks, Fusion PDM, CAS, Adobe Pro) software packages to support Engineering, CADD & Implementation Accountable personnel in completing scheduled task activities while also assisting with outage-related productivity gains. He assisted Document Control Records Management and other Fleet entities with technical questions. He prepared, validated, and processed documents within Duke Energy’s software systems. He also helped with design, software, & process considerations with multiple Responsible Engineers across multiple projects at one time and assisted with his knowledge of multiple applicable fleet and station Procedures.

Example projects worked on during this time included:

* Pressurized Service Water Modification
* PCB replacement Modifications for multiple PCBs in 230kV Switchyard
* Stator Modification
* Main Power Relay Modification
* Main Transformer Replacement Modification for multiple Units

Each of these projects included Electrical Elementary Diagrams, Equipment Layouts, Connection & Wiring Diagrams, Grounding, Raceway Layouts, Lighting Schematics, Logic Diagrams, Flow Diagrams, Bill of Materials, P&ID’s, Isometrics, Structural Steel Details, Fabrication Drawings, and Vendor Documents.

**TRI-COUNTY TECHNICAL COLLEGE (August 2013 thru December 2014) – ADJUNCT CAD INSTRUCTOR IN ENGINEERING DESIGN TECHNOLOGY**

Mr. Killough also served as Tri-County Technical College Adjunct Instructor in Engineering Design Technology. Here he planned out a curriculum that followed a syllabus and then instructed the students through lectures and labs as per each class type that he taught - Blueprint Reading, Creo Parametric, MasterCAM, Catia, SolidWorks from Beginner to Advanced 3D modeling and drafting for all Project Classes in both the Engineering and the Design class groups. He created and administered tests, quizzes, assignments, and projects that would tie in the area industry’s needs while also helping to involve and solidify the knowledge the students were learning from their hands-on lab work & lecture time.

# BRIEF BIO

Mr. Killough is a Senior Designer looking for new and exciting work to delve into and work effectively upon to provide for his family: Wife – Melissa, Children – Abigail, Elizabeth, Noah, Lucas, and new baby Cordelia. Mr. Killough was recently responsible for supporting the large- scale EG-DC AWS Amazon Data Center Project and any of Enercon’s 3D Designs that relate to Nuclear & Private Sector work, including Large Point Clouds, Plant 3D, Inventor, Recap Pro Project Measurements & Mesh Model Generation, along with Navis Works Manage Clash Detection Reports. Mr. Killough greatly appreciates hard or challenging work and gladly takes on

any task deemed complicated, urgent, or perceived as overwhelming by both peers and supervisors. He loves and appreciates learning during these challenges and working with others to meet pressing deadlines. Overtime is accepted when it is necessary, welcomed, and performed effectively to meet any urgent project timeline goals. Simply put, Mr. Killough enjoys his job and his work as a Designer and is very fortunate to have fun while doing that work, which in turn makes any challenge he faces both enjoyable and rewarding.

# REFERENCES

Tim Smith – Engineering Consultant Zachary Nuclear

Phone: 864 - 557 - 0214

Christina Hyde – Lead Designer

Nuclear Services Group – Chiefs – Enercon Services Inc. – Kennesaw GA Phone: 770 - 548 - 4438

Naitik Bhatt – Director

Energy Group / Data Centers – Enercon Services Inc. – Naperville IL Phone: 630 - 631 - 9070

Mike Mondich – Supervisor

Nuclear Services Group – Chiefs – Enercon Services Inc. – Kennesaw GA Phone: 678 - 859 - 4597