3121 S. Dubuque Ave., Sioux Falls, SD 57110
Cell: 719-500-1577 * carlwais@gmail.com

LinkedIn
https://www.linkedin.com/in/carl-waisanen-9604a245/

Profile

I am a quick-learning self-starter, passionate about data-driven decision-making. I have a strong foundation in **business analytics, workforce solutions**, **UX/UI, data governance, and data analytics**. I am a flexible cross-generational team player, ready to be led or lead, as the situation requires.

Software Skills

Power Platform ✱ Canvas Apps ✱ Power BI ✱ DAX ✱ Power Query ✱ M ✱ MS Planner ✱ MS Project ✱ MS Visio ✱ SQL ✱ Excel ✱ Human Factors ✱ Six Sigma DMAIC ✱ Lean 5S ✱ Shadow-Boarding ✱ SAS ✱ R ✱ Root Cause Analysis ✱ Workflow Analysis ✱ Process Mapping ✱ RSMeans ✱ PACES ✱ AutoCAD ✱ ArcGIS ✱ Simul8

Senior Operations Research Analyst. *Two+ years*. Dept of Treasury, Internal Revenue Service, Office of the Chief Procurement Officer, Data & Strategy Division:
- MS365 Power Platform Dataverse and Canvas App Developer for Audit and Customer Service Tracker Apps.
- Developed Azure rolls, security groups, and data governance.
    - As the Lead Data Steward, established the Data & Strategy Division Data Repository within Dataverse, developing gateways, pipelines, and flows.
- Designed user interactive Power BI report and dashboard analytics tools to include:
    - "Procurement Equity Market Research Tool" for finding qualified, disadvantaged, and minority businesses.
    - "Audit Tracking Power BI Report and Dashboard", linked to the Audit Tracker Canvas App.
    - "Customer Service Power BI Report and Dashboard", linked to the Customer Service Tracker App.
- Developed a SharePoint "Power BI Tools and Reports Catalog", with multi-tier descriptive landing pages. The catalog is linked on IRS and Treasury customer-facing SharePoint sites.
- Performed ad hoc reporting, data mining, and exploratory data analysis of internal and external Federal datasets.
- Performed Tableau to Power BI migrations.

Supervisory General Engineer. Chief, Portfolio Optimization Element. *Three years*. 50 Civil Engineering Squadron, Schriever Space Force Base, CO:
- Led strategic financial planning, budgeting, and program development.
- Directed community planning, energy management, and infrastructure program development.
- Applied human-centered design to optimize processes and improve efficiency.
- Implemented self-time study tools I developed in a prior job across the Civil Engineering Squadron.

Senior Operations Research Analyst. *Four years.* US Army HQ Medical Command, Army Medical Department, Quality and Patient Safety Center, Fort Sam Houston, TX 78234-1223:
- Founding member of Root Cause Analysis Event Support Engagement Team (RESET)
    - Traveled to national/international Army hospitals to Investigate sentinel events including death, wrong site surgery, and unintended retained foreign objects.
    - Performed root cause analysis of events.
    - Identified human factors and cognitive biases as root causes.
    - Performed task and process workflow analysis and process mapping.
    - Analyzed and improved human-human, human-technology, and human-machine interfaces.
- Developed a mission-related Human-Cognitive Biases and Psychological Factors checklist.
- Data mined and analyzed the Defense Health Agency SAS medical data lake.
- Designed and published the cloud-based Patient Safety Tracker for RESET missions.
- Established the SharePoint site for the Quality and Patient Safety Center.
- Authored a white paper report, proposing "A standardization method to improve the highest volume Military Health System (MHS) pre- and post-surgical procedures", utilizing;
    - Time-tested Six Sigma DMAIC (**define, measure, analyze, improve**, and **control) C**ycle
    - Lean 5S Workspace development and **Shadow board techniques** utilized in the manufacturing and aviation.

Operations Research Analyst. *Two years.* Army HQ IMCOM, G-8, Manpower and Force Analysis, 2405 Gun Shed Road, BLDG 2261, Fort Sam Houston, TX 78234-1223:
- Developed manpower models to determine staffing budgets for all Army Garrisons worldwide.
- All modeling efforts included task and process workflow analysis, process mapping, linear and non-linear regression analysis, along with confidence interval statistics.
- Leveraged the Army's large manpower data lake to perform analytics.
- Designed, operationally tested, and implemented a suite of self-time-study tools for validation and improvement of manpower models. The tools are tailored for people who perform administrative functions at their desks.
- Used Microsoft Access to auto-combine more than 5,000 individual time-studies for analysis.
- The consolidated data was then imported into Excel for analysis. Pivot tables, descriptive, prescriptive, and predictive statistics were used to develop and validate the manpower models.

General Engineer, Portfolio Optimization, Nine years. 19 Civil Engineering Squadron 528 Thomas Avenue, Little Rock AFB, AR 72099:
- Led strategic financial planning, budgeting, and program development for installation management.
- Managed all data development and analytics requirements for the installation.
- Developed facilities and airfield site plans with AutoCAD and ArcGIS.
- Master military construction cost estimator, to include analogous systems comparison, parametric, engineering, and actual costs. Estimating tools included PACES and RSMeans parametric software.
- Submitted congressional approval documents, worth $705M for large military construction (MILCON) facility construction projects, $235M funded over time.

Manufacturing Systems Engineer. *Eight years*. Graco, Inc., 3501 North 4th Avenue, Sioux Falls SD 57104:
- Performed time studies and work sampling. Conducted statistical analysis for labor standards and process optimization.
- Analyzed existing manufacturing processes with task and process workflow analysis, workflow time studies, financial life cycle analysis, ergonomic, process mapping, linear and non-linear regression analysis, confidence interval statistics and facilities layout analysis tools.
- Used Simul8 to develop discrete event simulation models for all manufacturing lines. Models were used for optimizing line operations, product design for manufacturability, and product financial forecasting.
- Used AutoCAD to design product fixturing for manufacture and facilities layout analysis.
- Implemented lean manufacturing principles (Kaizen, 5S, Kanban).
- Designed and implemented semi-automatic assembly machinery. PLC programmer for assembly machinery, CNC lathes and CNC mills.

Education
- Master of Science, Technology Management. South Dakota School of Mines and Technology.
- Bachelor of Science, Industrial/Systems Engineering. South Dakota School of Mines and Technology.

Certifications & Specialized Training
- **Pursuing Microsoft PL-300, APL-7001, APL-7002, APL-7003, and PL-200** certifications.
- **I have purchased a personal F2 level Microsoft Azure/Fabric subscription to facilitate certification training.**
- **Data Science & Analytics:** Power BI, Power Platform, SQL, SAS, R, Tableau, SharePoint (350 hrs).
- **Business Analytics Software:** Microsoft Planner, MS Project, MS Visio, and MS Office. Discrete event simulation software (Simul8), AutoCAD, and ArcGIS.
- **Defense Acquisition University:** Contracting Officer's Representative (COR), DAWIA Science/Tech Manager.
- **Leadership Training:** US Army Management Staff College, Civilian Leader Advanced Program.
- **Active DoD Top Secret Security Clearance**

Awards
- Achievement Medal for Civilian Service (AMCS), 2018
- Exemplary Civilian Service Medal (ECSM), 2011