

BERKELEY WILLIS

Arlington Heights, IL
bdwillis1@comcast.net

901.598.0859
www.linkedin.com/in/berkeley-willis-sec

CYBERSECURITY DATA SCIENTIST AND ANALYST

Providing data-driven and actionable information on challenging cybersecurity problems

Collaborative architect and builder of reliable big data applications to model cybersecurity environments and providing insights to the ever-changing security landscape. With dedication, build reliable, fault-tolerant, and automated processes to gather and analyze data from cybersecurity tools to enable data-driven decisions. Reduce complexity by critically observing processes and code and provide recommendations for improvement.

- **Data and Quantitative Analysis**
- **Data Mining**
- **Descriptive and Predictive Analytics**
- **Architecting Big Data Solutions**
- **Database Design and Implementation**
- **System Administration**

TECHNICAL SKILLS

Programming

Languages: BASH, R, Python, SQL, PL/SQL, Go, Javascript, C++, C, Perl

Databases: Oracle Database, MySQL, Teradata, MariaDB, InfluxDB, SQLite3, PostgreSQL

Platforms: Linux, Unix, Mac, Windows, Amazon Web Services (AWS), Docker, VMware

WORK EXPERIENCE

DISCOVER FINANCIAL SERVICES, Deerfield, IL

2018 - Present

Lead Cybersecurity Analyst

Design, build, and manage automated cybersecurity data collection and analysis platform devised enterprise KRI and KPI measures. Cross train and mentor teammates on new features and implement analyses.

- Developed and implemented 3 strategic risk models, allowing management to make data-driven decisions.
- Documented, built, implemented, and maintained database with dozens of tables for cybersecurity data, reducing complexity and adding new analytical capabilities.
- Integrated cybersecurity data from multiple enterprise tools to an operational database for use in modeling and other analyses.
- Reduced analyst support time by creating logging system, allowing root cause analysis for hundreds of jobs running overnight, adding scripting functions, centralizing support in libraries.
- Devised platform health analysis based on logs from platform components, reducing analyst reaction time to 10 minutes.

DISCOVER FINANCIAL SERVICES (Continued)

- Led and mentored team members on troubleshooting and organizing changes to platform components, avoiding unexpected failures.
- Outlined testing plans for streamlining code changes, reviewing all changes being submitted and documented.

CENTER FOR INFORMATION ASSURANCE, Memphis, TN

2015 - 2018

Graduate Research Assistant

Researched cybersecurity threat landscape, attacks, defensive practices, and computer forensics. Investigated ways to teach and created courses for cybersecurity topics targeted to various audiences, both technical and non-technical.

- Developed scenario-based exercises for state and local government employees, challenging and improving understanding of digital forensics.
- Wrote a 5-part class on social engineering, teaching general audiences about several threats such as phishing.
- Designed new techniques for teaching basic cybersecurity skills, making more accessible to high school and college students, and offering recommendations to introduction programs.
- Planned, instructed, and led 2 summer camps with other lab assistants for dozens of middle schoolers, teaching about cybersecurity foundational principles.

EDUCATION

- **Bachelor of Science (BS), Computer Science**, University of Memphis, Memphis, TN, 2017
- Currently pursuing Master of Science (MS), Data Science, Bellevue University, Bellevue, NE, Expected graduation date of 2021

CERTIFICATIONS

- SANS GIAC Certified Enterprise Defender (GCED) Certification

AWARDS AND RECOGNITIONS

- Founder and President of the Nu11t3st3r club and competition team at University of Memphis
- Organized and led University of Memphis cybersecurity competition team to place and win multiple competitions
- Recognized by NSA for Codebreaker challenges in 2015 and 2016
- Winner of multiple awards from University of Memphis for research