# NICKMOON MWARE

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# Summary

Experienced Software Engineer with a strong foundation in computer science. Skilled in full-stack software development, and proficient in multiple programming languages and technologies. Effective team collaborator with a track record of delivering innovative software solutions. Known for problem-solving ability and a commitment to staying current with emerging technologies. Seeking to contribute expertise in a dynamic software engineering role.

### Skills

- **Technical Skills:** Software Engineering, Machine Learning, System Operations, Data Mining and Analysis, Software Design, Scripting and Automation, Data Visualization, Oracle/SQL Server, Data Warehouse/ETL, PLSQL/T-SQL, Web Development
- Programming Languages: Python, C++, SQL, HTML, PHP, R.
- Libraries: Librosa, spaCy, Matplotlib, NumPy, Pandas

## **Experience**

#### **CBTC Integration Engineer**

Feb 2023 to Aug 2023

**Thales Group** — New York, NY

- Conducted thorough CBTC error inspections for R211 trains using Static and Dynamic PICO methods, resolving issues
- Boosted production efficiency by 100%, releasing 2 trains weekly, accelerating integration, and ensuring timely revenue service in NYC.
- Collaborated with cross-functional teams to troubleshoot complex CBTC errors, ensuring seamless system integration.
- Implemented innovative solutions, enhancing CBTC performance and ensuring compliance with safety standards.
- Facilitated successful integration, ensuring trains met safety protocols for smooth revenue service in NYC.

## **Data Analysis Intern BOSR UNL (Bureau of Sociological Research)** — Lincoln, NE

Jul 2022 to Aug 2022

- Analyzed data requirements and flow for university departments and State of Nebraska entities, enhancing processing efficiency by 12%.
- Transformed data requirements into models using SPSS and Python, ensuring streamlined information handling.
- Proposed system modifications, optimizing data inflow and supporting robust governance strategies.
- Collaborated with cross-functional teams to integrate data governance seamlessly, facilitating smooth operations.
- Applied analytical techniques, leading to a 12% improvement in data processing and management.

#### **Identity and Access Management Intern**

Jun 2021 to May 2022

#### **Ameritas Life Insurance** — Lincoln, NE

- Collaborated in a cross-functional effort to integrate IAM solutions, including MFA, SSO, and Identity federation for enhanced
- Trained and guided over 100 associates on IAM policies and procedures.
- Authenticated and authorized access for 100+ company associates while providing essential training.
- Contributed to the secure authentication process, strengthening the identity and access management framework.
- Assisted in the integration of IAM solutions to enhance access control.

## **Application Development and Support Intern**

Jun 2019 to May 2020

#### **AgFirst Farm Credit Bank** — Columbia, SC.

- Developed and optimized 13 T-SQL programs, enhancing data processing efficiency by 30%.
- Documented technical architecture and design of core loan accounting systems using Microsoft Visio and Orbus iServers, ensuring clarity for team understanding.
- Presented detailed project impact analysis to the company CEO and senior officials at the capstone ceremony, emphasizing tangible results and actionable insights.
- Collaborated effectively with cross-functional teams, resolving 15 application performance issues within stringent timelines.
- Contributed to software development initiatives, maintaining coding standards and achieving a 20% improvement in code reliability.

# Education

Master of Science, Computer Science

Dec 2022

University of Nebraska-Lincoln (UNL)

# **Project**

## Impact of Accents on the Operation of Voice User Interfaces (VUIs), Thesis, Python.

Aug 2021 to Dec 2022

- Conducted in-depth research in Natural Language Processing (NLP) and Human-Computer Interaction (HCI) to assess Word Error Rates (WER) across various Voice User Interfaces (VUIs), achieving an average WER percentage of 7.4%.
- Utilized advanced methods such as Mel spectrograms, depth of knowledge, and the librosa Python library for audio data processing in Deep Learning, resulting in a 79% accuracy in voice-to-word interpretation.

#### A Comparative Study of Six Scripts based on Extend Feature List, Python, Co-Author

Spring 2022

- Developed a Python analysis matrix to assess script symbols using feature-based similarity measures.
- Conducted comparative analysis on six scripts (Persian, Kurdish, Hebrew, Georgian, Swahili, and Egyptian Arabic), identifying shared patterns across at least 19 out of 27 alphabets by region.
- Published research in an accepted paper at the IDEAS conference and visually presented findings at the Budapest, Hungary conference in August 2022.

## A Relational Database for Chicago Police Department, Class Project, SQL

Fall 2021

- Developed an SQL relational database to efficiently manage crime-related data and offenses sourced from the Chicago Police Department.
- Utilized Oracle's database solutions for smooth data integration and created video tutorials demonstrating effective data retrieval techniques.