# Jennifer Gonzalez

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#### PROFESSIONAL SUMMARY

Adaptable and tech-savvy military spouse with a Bachelor's in Computer Science (summa cum laude) and a foundational background in data management, full-stack development, and cloud computing. Equipped with a unique blend of technical expertise and leadership skills honed over 15 years of managing family, frequent relocations, and entrepreneurial responsibilities. Demonstrates resilience, quick learning, and adaptability under pressure. Ready to contribute in roles such as data engineering, software development, or cloud computing, with a strong focus on scalability, optimization, and ethical, secure computing.

# **SKILLS & COMPETENCIES**

#### **Technical Skills**

# **Software Development & Programming**

- Full-stack development with HTML, CSS, JavaScript, and Python; experienced with C++ and Java.
- Optimized code performance by converting C++ projects to Python, leveraging Python's advanced data structures.
- Integrated MySQL and MongoDB database support, enabling persistent data management across multiple projects.

#### **Cloud Computing & Data Management**

- Skilled in AWS Cloud fundamentals; scheduled for AWS Cloud Practitioner certification.
- Managed relational (MySQL) and NoSQL (MongoDB) databases; ensured data security through credential management and environment variables.

## **Algorithms & Data Structures**

- Applied advanced algorithms to solve complex problems; optimized reinforcement learning models, e.g., Deep Q-Learning and Cartpole.
- Leveraged data structures to enhance application efficiency, working with hyperparameters and training improvements for machine learning models.

# **3D Graphics & Game Development**

- Developed interactive 3D models using OpenGL, applying mathematical concepts for animation.
- Created Al-driven game development projects with reinforcement learning for agent training and optimization.

#### **Soft Skills**

- **Leadership & Project Management**: Led small business operations at Milstitch, managing client relations, project timelines, and financial planning.
- **Problem Solving & Adaptability**: Successfully balanced frequent relocations and family responsibilities while earning a degree, thriving in fast-paced, challenging environments.
- Attention to Detail & Ethics: Committed to secure and ethical coding practices, with experience in data privacy and security integration.

## PROFESSIONAL EXPERIENCE

Block Institute, Brooklyn, NY

*Treatment Coordinator* (2009 – 2013)

- Coordinated and managed individualized treatment plans for clients with developmental disabilities.
- Developed project management, problem-solving, and collaborative skills essential to supporting diverse client needs.

#### Milstitch Framing

Co-owner & Project Manager (2013 – Present)

- Co-founded and managed a small business, overseeing operations, project timelines, and client relations while handling family responsibilities.
- Demonstrated adaptability and resilience, managing successful growth through relocations and client demands.

#### **EDUCATION**

#### **Bachelor of Arts in Computer Science**

Southern New Hampshire University, Graduated October 2024, summa cum laude

- Capstone Project: Optimized data-intensive C++ project (CornerGrocer) by migrating to Python and integrating MySQL for scalable, efficient data storage.
- Relevant Coursework: Cloud Computing, Database Management, AI, Software Development, 3D Graphics.

#### **Bachelor of Science in Forensic Psychology**

John Jay College of Criminal Justice, Graduated May 2004

# **CERTIFICATIONS**

- AWS Certified Cloud Practitioner (Scheduled)
- CompTIA Security+ (Scheduled)
- CompTIA A+ (Scheduled)

## **PROJECTS**

# **CornerGrocer Optimization Project**

- Migrated a data-intensive C++ project to Python, improving performance through advanced data structures (e.g., collections.Counter).
- Integrated MySQL database support, securing credentials with environment variables.

#### **Deep Q-Learning Agent for Treasure Maze Game**

• Developed a reinforcement learning agent (pirate) for a maze environment; tuned hyperparameters and implemented early stopping to optimize learning.

# **Cartpole Reinforcement Learning**

• Solved Cartpole Problem using reinforcement learning, refining exploration rates, learning rates, and discount factors for performance improvement.

## TECHNICAL TOOLS

Python | C++ | Java | HTML/CSS | JavaScript | MySQL | MongoDB | AWS Cloud LaTeX | GitHub | OpenGL | VS Code | PyCharm | IntelliJ | Eclipse

# ADDITIONAL INFORMATION

- **Military Background**: Gained experience adapting to new environments, building resilience, and managing diverse responsibilities effectively.
- **Ready to Contribute**: Strong communicator, collaborative, and committed to ethical, secure data practices. Eager to bring technical skills and leadership strengths to a collaborative, growth-oriented tech team.

# References

Michael Gonzalez

**Director of Workforce Development Programs** 

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