DASHEL RUIZ PEREZ

PROFESSIONAL SUMMARY

Data Analyst, ML Engineer & Al Solutions Architect with 6+ years of experience transforming data into business value across semiconductor manufacturing and Al-driven platforms. Led end-to-end development of production ML systems, delivered \$100K+ cost savings through predictive analytics, and currently architecting full-stack Al recruitment solutions. Expertise in Python, cloud deployment (GCP), and cross-functional leadership in fast-paced environments.

CORE COMPETENCIES

Programming & Development

Python, SQL (PostgreSQL, Oracle), JavaScript, HTML/CSS, Git

Machine Learning & Al

Scikit-learn, TensorFlow, Predictive Analytics, RAG Systems, Statistical Process Control, Time Series Analysis

Data Engineering & Cloud

ETL Pipelines, Google Cloud Platform (GCP), Docker, REST APIs, Database Design

Data Analysis & Visualization

Pandas, NumPy, Matplotlib, Seaborn, Tableau, Statistical Analysis

Leadership & Collaboration

Cross-functional Team Leadership, Technical Instruction, Project Management, Client Training

PROFESSIONAL EXPERIENCE

Talenti.ai (Startup) | ML Engineer & Full-Stack Al Solutions Architect May 2024 – Present

- Architected and deployed Al-driven recruitment platform from proof-of-concept to production, managing full development lifecycle on GCP using Docker and Google Run
- **Built and integrated** machine learning models for PDF data extraction, integrated third-party APIs for data capture, and designed database structures for efficient storage and retrieval.
- Designed RAG (Retrieval-Augmented Generation) framework for intelligent content creation, enabling dynamic data storage and retrieval capabilities
- Established enterprise-grade security protocols and automated workflows using Zapier integrations and GCP VMs
- Collaborated with C-level stakeholders to define product roadmap and new features, aligning development efforts with the company's strategic vision

ThriveDX | Lead Software Developer Instructor

May 2022 – January 2025

- Lead comprehensive curriculum delivery for full-stack development and cybersecurity programs across 4 major university partnerships (SDSU, NC State, NYU, CSU Long Beach)
- **Delivered** Python, SQL, JavaScript, and cybersecurity instruction to 200+ students annually with diverse technical backgrounds
- Mentored students through 1-on-1 coaching sessions for positive learning outcomes
- **Utilized advanced LMS platforms** to deliver engaging content in synchronous and asynchronous formats across multiple time zones

Microchip Inc. | Software Engineer

October 2021 – January 2023

- **Developed predictive analytics applications** for real-time tool monitoring, improving manufacturing efficiency by 25% across 200+ production tools
- Implemented ML-based risk detection algorithms that identified process anomalies, preventing \$100K+ in potential losses and reducing defect rates by 30%
- Built comprehensive Oracle database system processing 200M+ lines of unstructured manufacturing data, enabling real-time insights for CMP operations
- Collaborated with cross-functional engineers to gather requirements and deploy integrated solutions, reducing data retrieval time from hours to minutes

- Created data visualization dashboards using Python and statistical analysis, supporting decision-making.
- Enhanced tool-tracking solutions with ML-based summary statistics, providing actionable insights across multiple manufacturing areas

Microchip Inc. | Intern, Yield Enhancement Software Engineer February 2021 – September 2021

- **Built ETL applications** that streamlined data workflows for engineering teams, increasing productivity by 40% and enabling faster decision-making
- Applied state-of-the-art ML algorithms to analyze wafer process data, identifying risk patterns that contributed to a 15% yield improvement
- **Developed parsing algorithms** for unstructured data sources, ensuring 99%+ data integrity across production systems
- **Supported critical production data systems** while collaborating with cross-functional teams to drive continuous process improvements.

Microchip Inc. | Process Engineer Technician I (TF/CMP)

October 2019 – January 2021

- Conducted thorough root cause investigations for non-conformances, implementing solutions that reduced process variation by 20%
- **Utilized advanced SPC monitoring tools** to analyze trends and facilitate timely process adjustments, maintaining optimal production parameters
- Coordinated new tool qualifications with equipment and production teams, ensuring seamless integration of \$2M+ manufacturing equipment
- Applied data collection and analysis methodologies to support process optimization across multiple production lines

Previous Microchip Roles

December 2013 - October 2019

Process Enhancement Specialist | *June 2017 – October 2019* • **Standardized tool** qualification processes

- Collaborated with Process and Equipment Engineering to resolve repetitive defects, saving \$50K+ annually in rework costs
- **Trained and mentored technicians** on qualification procedures, improving team efficiency and knowledge transfer

Production Specialist (Back-up Lead) | December 2013 - April 2016

- Led production operations in the Diffusion area as backup supervisor, managing daily workflow and team coordination
- **Promoted from Expeditor to Production Specialist** within 8 months, demonstrating rapid skill development and leadership potential.

EDUCATION

Master of Data Analytics | Western Governors University | May 2023

Bachelor of Science, Computer Science | Western Governors University | August 2021

Associate of Science (Transfer) | Portland Community College, OR

PROFESSIONAL CERTIFICATIONS

- Google Advanced Data Analytics | Coursera | 2025
- Machine Learning Professional Certificate | Universidad Autonoma de Yucatan | 2024
- Data Engineering Zoomcamp | DataTalksClub
- Data Engineer in Python | DataCamp
- Data Analyst in Tableau | DataCamp
- CompTIA Project+