

# DENVER G. MAGTIBAY

ECE, ECT, MAIB | Agentic AI Engineer & Data Scientist

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## EXECUTIVE CAREER OVERVIEW

Denver G. Magtibay represents a rare convergence of academic excellence, industry expertise, and cutting-edge AI innovation. With a distinguished 7-year career as a renowned engineering instructor and national board exam review specialist, combined with current leadership as an Agentic AI Engineer, Denver has successfully transitioned from traditional engineering education to pioneering artificial intelligence applications. His career trajectory showcases consistent academic achievement (valedictorian at multiple levels, topnotcher in national licensure examinations) and professional impact (leading the #1 ECE review center in the Philippines with 80% annual passing rate).

## CAREER ACHIEVEMENT METRICS

34

AI/ML Projects on Kaggle

Top 1%

Kaggle Notebooks Ranking

99.6%

Highest Model Accuracy (Breast Cancer)

7 Years

Engineering Education Excellence

## PROFESSIONAL EXPERIENCE ANALYSIS

### Current Role: Agentic AI Engineer (August 2025 – Present)

**Organization:** FutureCraft Technologies Inc., Wyoming, USA

**Key Responsibilities:** Designing and developing intelligent agent-based systems that autonomously plan, reason, and execute tasks by integrating advanced large language models (LLMs) with specialized tools, APIs, and knowledge bases. Building orchestrated multi-agent architectures, implementing retrieval-augmented generation (RAG), and applying reinforcement and guardrail mechanisms.

**Innovation Focus:** This role represents the culmination of Denver's AI expertise, positioning him at the forefront of agentic AI development—one of the most advanced areas in contemporary artificial intelligence.

### Foundation Role: Review Specialist & Data Scientist (January 2017 – 2025)

**Organization:** Smart Edge ECE Review Specialist, Manila, PH

**Key Achievements:**

- Led the #1 ECE review center in the Philippines with 80% annual passing rate
- Dominated October 2024 ECE Board Exam, sweeping all topnotchers
- Pioneered AI-driven educational content using GPT, RAG, Few-Shot Learning, and Chain-of-Thought prompting
- Developed predictive models for student success and board exam question forecasting

**Strategic Impact:** This 8-year tenure established Denver as a national authority in engineering education while simultaneously building expertise in AI applications for education—a unique combination that bridges traditional engineering and modern AI.

### Academic Foundation: College Instructor (November 2016 – 2021)

**Organization:** University of Batangas, Batangas City, PH

**Specializations:** Mathematics, Engineering Sciences, Electronics Engineering

**Impact:** Fostered academic growth through innovative teaching methods and comprehensive curriculum development, preparing the next generation of engineers and scientists.

AI & MACHINE LEARNING PORTFOLIO ANALYSIS

Domain Expertise Distribution (34 Projects)

Healthcare & Medical AI (26% - 9 projects):

- MRI Brain Tumor Classifier (99.5% Accuracy)
- AI-Powered Breast Cancer Predictor (99.6% AUC)
- Predicting Prostate Cancer Risk (91% Accuracy)
- Blood Cell Classifier (99% F1 Accuracy)
- Pneumonia Detection with ResNet & PyTorch
- Skin Disease Classification with EfficientNet
- CKD Prediction Using Stacked XGBoost Models
- Cancer Education Q&A with GPT-4 and RAG
- Aneurysm Detection Baseline Notebook

Agentic AI & Advanced Systems (12% - 4 projects):

- Agentic Hedge-Fund Analyst with LangGraph (Starred)
- LangGraph Career Copilot: AI Resume & Job Agent (Starred)
- Agentic Web Scraper with LangGraph
- Cancer Education Q&A with GPT-4 and RAG

Finance & Economics (12% - 4 projects):

- DRW Crypto Market Prediction (0.95166 score)
- Smart Credit Card Approval Prediction
- 20-Model Insurance Fraud Ensemble
- Agentic Hedge-Fund Analyst

Computer Vision & Object Detection (9% - 3 projects):

- Vision-Driven Driving: YOLOv11 in Action
- Smarter Traffic with YOLOv11 AI Vision
- AI Text Detector: W2V, TF-IDF & DistilRoBERTa

Climate & Environmental Modeling (9% - 3 projects):

- Typhoon Forecasting for the Philippines (2014–2024)
- Metro Manila Floods: Rule-Based ML Baseline
- Rainfall Prediction via XGB/TabPFN/SVC Ensemble

RESEARCH & ACADEMIC CONTRIBUTIONS

Current Research Projects

1. Automated Question Generation for Electronics Engineering Exams

Authors: Denver G. Magtibay, Dr. Debashis Guha  
Status: Accepted for ICECET 2025 – International Conference on Electrical, Computer, and Energy Technologies, Paris, France, July 3-6  
Innovation: GPT-4, LangChain, and Streamlit system with Chroma vector database and RAG implementation.

2. LightRAG-Enhanced Automated Question Generation System

Authors: Denver G. Magtibay, Dr. Debashis Guha  
Status: Accepted for WAIE 2025 – 7th International Workshop on Artificial Intelligence and Education, Yokohama, Japan, September 27-29  
Innovation: Graph-based text indexing and dual-level retrieval system outperforming traditional RAG approaches.

EDUCATIONAL EXCELLENCE TRAJECTORY

Graduate Education

Master of Artificial Intelligence in Business (2023-2025)

SP Jain School of Global Management, Sydney, Australia

- SP Jain Scholar (Dean's Lister 6/6 terms)
- GPA: 3.88/4.00
- SP Jain MAIB Student Ambassador

IBM Professional Certificate Program for Data Science (2023-2024)

EdX Online

- IBM Scholar (10/10 Courses)
- IBM Professional Data Scientist Certification

Undergraduate Excellence

Bachelor of Science in Electronics Engineering (2011-2016)

University of Batangas, Batangas City, PH

- Magna Cum Laude – Batch Valedictorian
- GPA: 1.20/1.00
- 5th Placer in 2016 Electronics Engineering Licensure Examination
- 4th Placer in 2016 Electronics Technician Licensure Examination

Academic Foundation

Secondary Education (2007-2011): Valedictorian

Primary Education (2001-2007): Valedictorian

**Consistent Excellence Pattern:** Denver's educational trajectory demonstrates sustained academic excellence from elementary through graduate level, establishing a foundation for professional achievement.

TECHNICAL COMPETENCIES & CERTIFICATIONS

Advanced AI & Machine Learning

- **Agentic AI:** LangGraph, Multi-Agent Systems, Orchestrated Architectures
- **Large Language Models:** GPT-4 Integration, Prompt Engineering, RAG Implementation
- **Deep Learning:** PyTorch, ResNet, EfficientNet, YOLOv11, DistilRoBERTa
- **Machine Learning:** XGBoost, CatBoost, Ensemble Methods, Stacking Techniques
- **Time Series:** SARIMA, Prophet, Forecasting Models

Professional Certifications

- Licensed Electronics Engineer (Philippines)
- Licensed Electronics Technician (Philippines)
- IBM Professional Data Scientist
- Kaggle Notebook Expert (Top 1%)
- 5-star HackerRank Python Programming and SQL

CAREER IMPACT & RECOGNITION

Industry Recognition

- Kaggle Achievement:** Top 1% ranking in Kaggle notebooks represents recognition by the global data science community for exceptional technical quality and educational value.
- Educational Impact:** Leadership of Smart Edge Review Center's dominant performance in national board examinations, including sweeping all topnotchers in October 2024, demonstrates measurable impact on engineering education in the Philippines.
- Research Contributions:** Accepted presentations at international conferences (ICECET 2025, WAIE 2025) establish Denver as a contributing researcher in AI-driven educational technologies.

Professional Development Trajectory

Denver's career demonstrates strategic evolution from traditional engineering education to cutting-edge AI applications. This progression reflects both deep technical competence and visionary understanding of technology's role in transforming industries. His unique combination of educational expertise and AI innovation positions him as a bridge between traditional engineering disciplines and emerging AI technologies.

STRATEGIC CAREER POSITIONING

- Denver G. Magtibay represents a distinctive professional profile that combines proven educational leadership, exceptional academic achievement, and cutting-edge AI expertise. His career trajectory demonstrates consistent excellence while adapting to technological evolution. From establishing himself as a national authority in engineering education to pioneering agentic AI systems, Denver exemplifies the modern technical professional who bridges traditional engineering foundations with revolutionary AI applications.
- His portfolio of 34 AI projects, top 1% Kaggle ranking, and current role developing agentic AI systems position him at the forefront of artificial intelligence innovation. The combination of educational expertise, research contributions, and practical AI implementation creates a unique professional value proposition suited for leadership roles in AI-driven organizations, research institutions, or technology companies seeking to leverage AI for transformational impact.

Document Prepared: August 2025 | Total Projects Analyzed: 34 | Professional Experience: 8+ Years  
Kaggle Profile: <https://www.kaggle.com/denvermagtibay> | GitHub: <https://github.com/WarDen-Git>