JOHN IVAN DIAZ

Machine Learning (ML) Engineer

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PROFILE

Hi! I'm John Ivan, a Google Cloud Certified Professional Machine Learning Engineer and award-winning researcher who loves building ML systems. I'm passionate in artificial intelligence due to the profound impact it has done to us. I have strong knowledge in end-to-end ML lifecycle. I have hands-on experience defining use cases, developing ML models, and applying MLOps practices that promote Responsible AI. I have worked with global software engineering teams and have experience working at scale. I'm a fresh graduate, but the track record, Cum Laude, publications, awards, and leadership roles, shows I learn fast and committed to excellence. I'm eager to commence my professional journey with reputable organization dedicated to world class quality.

PROFESSIONAL CERTIFICATES

- **Machine Learning Engineer Professional Certificate** (7 courses) • Google
- **TensorFlow Developer Professional Certificate** (4 courses) • DeepLearning.AI

These professional certificates demonstrate my ability to:

- Define business use cases and success criteria, assess feasibility, explore and prepare datasets, and select appropriate architectures and algorithms that match the organization's objectives.
- Develop end-to-end machine learning pipelines, clean and engineer features, build models, run evaluations, iterate on improvements, and present results to stakeholders.
- Deploy models to production, plan infrastructure needs, operationalize prediction services for scalability and reliability, and implement monitoring to maintain model accuracy.
- Apply MLOps practices that drive collaboration with cross-functional teams and promote Responsible AI.

SKILLS

Programming Languages: Python, Java, C, SQL, MATLAB
Machine Learning Tools: TensorFlow, Keras, Scikit-Learn, Computer Vision, LLM
Data Management: BigQuery, Apache Beam, Dataflow, Pub/Sub, Artifact Registry
Additional Technologies: GCP, Vertex AI, Kubernetes, Docker, Git/GitHub

CONFERENCES

10th International Conference on Next Generation Computing 11/24

- Presented research about digital twin technology for agriculture using computer vision to international researchers and practitioners.
- Won ***"Best Paper Award"*** selected among 40 oral presenters.
- Publication: earticle.net/Article/A468830

9th University Research Conference 04/25

- Presented research about digital twin technology for agriculture using deep learning to international researchers and practitioners.
- Won ***"Best Presenter Award"*** selected among 52 poster presenters.

OTHER AWARDS

Technology:

- EduLearn Excellence in ICT (2021)
- EduLearn Excellence in Robotics (2021)
- Best in Computer (2019, 2015)
- TechFactors Most Outstanding IT Student (2018)

Communication:

- Campus Journalism Award (2021)

Character:

- Saint Joseph Freinademetz (2021, 2019)
- Saint Arnold Janssen (2015)

PROJECT EXPERIENCE

Reptile Classifier Model

- Developed a supervised CNN to classify reptile species into 5 classes using the CIFAR-100 dataset.
- Implemented normalization, one-hot encoding, augmentation, early stopping, and dropout, achieving 90% accuracy despite limited training data.
- Reported performance and dataset limitations, employing Responsible AI.

Plant Growth Multimodal Time-Series Model

- Developed a predictive model of plant growth using 2 input modalities: images and numerical data.
- Implemented YOLOv8 preprocessing with ConvLSTM and 3D convolution, realizing novel multimodal solution for the defined ML task.
- Engineered custom loss function blending Mean Squared Error and Temporal Consistency, achieving higher accuracy than standalone losses.

2D to 3D Image Reconstruction Computer Vision Algorithm

- Developed a novel algorithm that reconstructs constrained images to 3D models using OpenCV and Open3D, offering alternative solution to photogrammetry requiring multiple views.
- Merged monocular depth estimations on stereo images, improving depth quality compared to standalone monocular estimation.
- Integrated deep learning and computer vision, yielding 3D models from predicted images.

INTERNSHIP

Software Engineering Intern 01/25–05/25
Accenture • Cebu City, Philippines

- Collaborated with global software engineering teams across time zones working on a procurement platform.
- Delivered mission-critical KPI reports using SAP Ariba, giving stakeholders the visibility to act quickly, minimize financial risks, and maintain 24/7 operational continuity.
- Monitored automation using Control-M and flagged system failures in real time, accelerating team response and reducing resolution delays.
- Communicated system performance accurately, reinforcing fairness and guaranteeing dependable client transactions.

EDUCATION

M.Eng. Artificial Intelligence Expected 01/26–12/27
University of the Philippines Diliman
UP Diliman is the highest ranked Philippine university based on QS World Rankings. Admitted over competitive selection process.

BS Computer Engineering 08/21–05/25
University of San Carlos
Honors: Cum Laude

High School 06/15–05/21
Holy Spirit School of Tagbilaran
Honors: With High Honors

LEADERSHIP

- **Research collaborator** with international students from South Korea (July 2–12, 2024)
- **Class President** for 8 consecutive years (2013–2021)
- **Ambassador** for 2 years in school robotics team (2019–2021)
- **President** for 3 years in school media team (2018–2021)
- **Creative Director** for 4 years in school publication team (2017–2021)
- **Founder** of creative sideline business alongside studies and engaged local and international clients (2017–Present)

OTHER INTERESTS

- UI/UX Design
- Web Development
- Swift

References available upon request.