JOHN IVAN DIAZ

Machine Learning Engineer / Al Developer

PROFILE

Hi! I'm John Ivan, a Professional Machine Learning Engineer / AI Developer, 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
- Machine Learning on Google Cloud Specialization (4 courses) Google

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)

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- ✓ diazjohnivantuyor@gmail.com





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 University of San Carlos

08/21-05/25

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