



JAMES EARL D. CUBILLAS, M.Sc, ECT

Experienced researcher with demonstrated history of working in research industry. Skilled in GIS-Remote Sensing, Robotics, Programming, and Data Science. Strong engineering professional with a Master of Science focused on Information Technology from Caraga State University.

Skills: Data Science and Engineering · Teaching · Computer Science Education · Artificial Intelligence (AI) · Research and Development (R&D) · Embedded Systems · Programming

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947-F Radaza Compound, Buhangin,
Butuan City



EDUCATION

Master of Science in Information Technology

Caraga State University, Butuan City
2018-2020

Bachelor of Science in Electronics and Communications Engineering

Caraga State University, Butuan City
2008-2013

AWARDS

Top Performing Grantees

DOST-Caraga
2021

Top Grantees

DOST-Caraga
2022

Publication Award

"The Application of Support Vector Machine (SVM) Using Cielab Color Model, Color Intensity, and Color Constancy as Features for Ortho Image Classification of Benthic Habitats in Hinatuan, SDN, Philippines"
Caraga State University
2016

Publication Award

"Mapping of High Value Crops through an Object-Based SVM Model using LiDAR Data and Orthophoto in ADN, Philippines"
Caraga State University
2016

CORE SKILLS

Time management

Problem solving

Creativity

Leadership

EXPERIENCE

Data Scientist

Qualfon | Cebu City | 2022-2023

The job involves mining and analyzing data from company databases to improve processes, creating analytical solutions, and developing optimization models. The role requires working with complex data sets, applying various models and techniques found in Operations Research, and collaborating with a team of engineers. The position also involves assessing workflow processes to identify inefficiencies and proposing streamlined processes using Business Process Reengineering tools.

Instructor - I

Caraga State University | Butuan City | 2022

Project Staff (Level 3) - Design and Development of Intelligent Traffic Control and Management System.

Computer Vision and Robotics Engineer / Science Research Specialist II

Caraga State University | Butuan City | 2022

Program Title: Accelerated R&D Program for Capacity Building of Research and Development Institutions and Industrial Competitiveness: Niche Centers in the Regions for R&D (NICER) Program:Sustainable Mineral and Mining Operations using Industry 4.0

Project: Project 2. Mine Geotechnical and Environmental Assessment Robotic System (Mine GEARS)

The general objective of this project is to develop a Mine Geotechnical and Environmental Assessment Robotic System (Mine GEARS) that will serve as a cost-effective platform for both the Monitoring Agency (MGB) and Mining company in the remote monitoring of geotechnical and environmental conditions. Specifically, this project will:

- Design and develop an Integrated Sensor System that can collect key environmental and geotechnical parameters in the mining site.
- Design and develop a UGV-UAV system that can carry the Integrated Sensor System payload and have autonomous navigation capabilities.

Computer Vision Engineer / Computer Programmer II

Caraga State University | Butuan City | 2021 - 2022

DOST PCIEERD Artificial Intelligence Program Project: Design and Development of Intelligent Traffic Control and Management System.

Functions and Responsibilities:

- Develop a compact State Representation for vehicle traffic to be fed as input to the Deep Reinforcement Learning Agent (AI Traffic Controller).
- Design and Develop messaging patterns for each traffic controller.
- Design and Develop an AI Traffic controller using IoT devices.

EXPERTISE

Python
IoT application
Full-stack Development
Pytorch
Data Science
Robotics
Game Development
Embedded Systems

LANGUAGES

English (Intermediate)
Korean (Beginner)
Mandarin (Beginner)

Professional Development

Deep Learning Specialization
deeplearning.ai
2020
<https://www.coursera.org/account/accomplishments/specialization/certificate/K4C545CWV3l4>

Natural Language Specilization
deeplearning.ai
2020
<https://www.coursera.org/account/accomplishments/specialization/certificate/88Ug6VGEMv2S>

Generative Adversarial Networks
Specilization
deeplearning.ai
2020
<https://www.coursera.org/account/accomplishments/specialization/certificate/VU8BHAXNPNGU>

AI for Medicine Specilaization
deeplearning.ai
2020
<https://www.coursera.org/account/accomplishments/specialization/certificate/VJBNF8ZFKZA2>

Tensorflow Developer Specialization
deeplearning.ai
2020
<https://www.coursera.org/account/accomplishments/specialization/certificate/HTS67SZWLLSJ>

Mathematics for Machine Learning Spec-
cialization
Imperial College of London
2021
<https://www.coursera.org/account/accomplishments/specialization/certificate/V8FZYMKMOSFE>

Self-Driving Cars
University of Toronto
2021
<https://www.coursera.org/account/accomplishments/specialization/certificate/TVTUUWUWVM4H>

Machine Learning
University of Washington
2021
<https://www.coursera.org/account/accomplishments/specialization/certificate/LJ3RTHHCOPXC>

Google Data Analytics
Google
2021
<https://www.coursera.org/account/accomplishments/specialization/certificate/TVTUUWUWVM4H>

EXPERIENCE continued

Data Scientist / Computer Programmer III

Manage your Associated Property and Map it for Visualization (MapX)
| Butuan City | 2020 - 2021
<https://www.facebook.com/MapXPh/photos/pcb.333712671402926/333708778069982/>

Function and Responsibilities:

- Design and Develop Computer-Aided Parcellary Profiling using Artificial Intel-
ligence.
- Install, Configure, manage GPU-based Spatial Server.
- Design and Develop back-end and front-end technology for Mapx Portal.
- Develop Mapx Web API that will communicate with the android application of
other systems that support Web API.

Instructor - I

Caraga State University | Butuan City | 2019

A faculty member of the Department of Computer Science of the College
of Computing and Information Sciences (CCIS), Caraga State University.

Software Consultant

Caraga State University | Butuan City | 2018 - 2019

Services for the Development of an Integrated Geographic Information Sys-
tem (GIS) Mapping -AQUAR and Enhanced Production and Risk Manage-
ment in Agriculture Integrated Decision Support System (EPRI-MA). A Project
of Food and Agriculture Organization of the United Nations (UNFAO) with
the partnership with Bureau of Fisheries and Aquatic Resources (BFAR), and
Caraga State University.

Machine Learning Engineer / Senior Science Research Specialist

Caraga State University | Butuan City | 2015 - 2017

Project 2.2.14 LiDAR Data Processing, Modelling, and Validation by HEIs for the
Detailed Resources Assessment in Mindanao. A funded research project of the
Department of Science and Technology (DOST-PCIEERD), in partnership with Caraga
State University.

- Develop procedures using segmentation and supervised classification algo-
rithms (SVM) for high-resolution classification of High-value crops on a derived
LiDAR datasets.

Science Research Specialist

Caraga State University | Butuan City | 2014

Responsible Mining in Mindanao- ICT Support (ICT4RM)
<http://strpm.carsu.edu.ph/content/responsible-mining-research-mindanao>

GIS Analyst

Caraga State University | Butuan City | 2014

CLAIMS-GIS Project

REFERENCES

ROLYN C. DAGUIL, Ph.D

Caraga State University
Butuan City
Dean, CCIS
Project Leader, MapX, EPRI-
MA, AQUAR, ICT4RM

E - rcdaguil@carsu.edu.ph

ALEXANDER T. DEMETILLO,

Ph.D
Caraga State University
Butuan City
Director, Fablab, CSU
Project Leader, CLAIMS-GIS

E - atdemetillo@carsu.
edu.ph

MICHELLE V. JAPITANA,

Ph.D
Caraga State University
Butuan City
Director, Planning Office, CSU
Project Leader, Phil-LiDAR 2.B.14

E - mvjapitana@carsu.edu.ph

ALFONSO BARRENECHEA

Qualfon, Mission Office
Director, Qualfon University
Houston, TX

E - abarrenechea@qualfon.com

PUBLICATIONS

<https://scholar.google.com/>

[citations?hl=en&user-mxdcl-](#)

[FoAAAAJ&view_op=list_works&au-](#)

[thuser=1&gmla-AJsN-F5GEvcyK9TEb5pwv-](#)

[jtzyD8VzfopK2uABoPhfTcOBgmLodouUW-](#)

[fayOXPLRkmCFMdVs5Yzaf19RJ6pPXbOlMAX-](#)

[k5lfqIP8F28NW/VVzLOxLA8H1K1YcM8](#)

CERTIFICATIONS AND TRAININGS

Introduction to Data Science Track (2019)

DOST, Technical Online Course, Johns Hopkins University, Coursera

- *Data, Connectivity and Intelligence Data Science Track: The Data Scientist Toolbox*
- *Data, Connectivity and Intelligence Data Science Track: R Programming*
- *Data, Connectivity and Intelligence Data Science Track: Getting and Cleaning Data*
- *Data, Connectivity and Intelligence Data Science Track: Exploratory Data Analysis*

Programming with Python (2021)

Department of Information and Communications Technology

- *Programming for Intermediate Users Using Python Certificate*
- *Learn Basic Statistics with Python Certificate*
- *Analyze Data with Python Certificate*
- *Visualize Data with Python Certificate*
- *Build Python Web Apps with Flask Certificate*

Data Engineer Pathway (8/14 Courses) (2020)

Smarter Philippines through Data Analytics, R & D, Training and Adoption (SPARTA), Development Academy of the Philippines (DAP), Sponsored by DOST

- *Getting Grounded on Analytics*
- *Python for Data Engineering*
- *SQL for Data Engineering*
- *Statistical Analysis and Modeling Using SQL and Python*
- *Dashboards and Drill-Down Analytics*
- *Data Science and Machine Learning Using Python*
- *Data Visualization Fundamentals*
- *Essential Excel Skills for Data Preparation and Analysis*

Robotics Specialization (5/6 Courses) (2021)

The University of Pennsylvania under the COURSERA platform. Sponsored by DOST-CARAGA

- *Aerial Robotics*
- *Mobility*
- *Perception*
- *Computational Motion Planning*
- *Estimation and Planning*

Web Design for Everybody: Basics of Web Development & Coding Specialization (3/4 Courses) (2020)

Python and Pandas for Data Engineering (2022)

Duke University under COURSERA platform. Sponsored by DOST-CARAGA

Foundations of Healthcare Systems Engineering (2022)

The Johns Hopkins University under the COURSERA platform. Sponsored by DOST-CARAGA

DICT-WD002 Using HTML and CSS to Design a Website (2022)

Department of Information and Communications Technology

Real-time OCR and Text Detection with Tensorflow, OpenCV and Tesseract (2020)

Coursera Project Network Sponsored by DOST-CARAGA

Deploy Models with TensorFlow Serving and Flask (2020)

Coursera Project Network Sponsored by DOST-CARAGA