Joe Hernandez

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EDUCATION

Syracuse University, Syracuse, NY

Master of Science: Applied Data Science 2017 - Present

Coursework: Data Analysis & Decision Making, Business Analytics, Financial Analytics,

Data Mining, Statistical Methods in Information Systems Technology.

Bachelor of Science: Economics, Finance 2009

Coursework: Economic Ideas and Issues, Corporation Finance, Financial Econometrics,

Economic Growth, Mathematical Economics, Investments.

Miami Dade College, Miami, FL

Associate of Arts: Business Administration 2006

Coursework: Business Calculus, Principles of Business, Business Law, Basic Business Statistics,

Business Writing, Financial Accounting, Managerial Accounting.

EXPERIENCE

U.S. Army Corps of Engineers, Sacramento, CA

Economist – GS-11 CESPK June 2018 – Current

* Lead regional economist for Army and Air Force MILCON projects and trained district economists to conduct MILCON Economic Analysis independently undertaking quality control role for their reports. Locations added: Camp Parks, Davis Monthan, Edwards AFB, Ft Hunter Liggett, Ft Huachuca, Luke AFB, and Presidio of Monterey.
* Economist for levee screening for nearly 100 sites mostly located in the California Delta region incorporating consequence analysis to demographics, evacuation effectiveness, and critical infrastructure impacts due to flooding.
* Economist for Semi-Quantitative Risk Assessment for California Delta region and mentoring junior economist to formulate a report based on hydrologic and levee screening data using ArcMAP GIS tabular and visual information.
* Performed regional on-site structure inventory for Sutter, Lower Cache Creek, and Pine Flat Dam Flood Risk Management Studies adding programmed randomized sampling of residential, commercial, and industrial buildings for economic updates.
* Completed the following PROSPECT courses:
  + Leadership Development Program (Level 2)

Economist – GS-09 CESPK June 2017 – June 2018

* Performed modeling for levee rehabilitation project for PL 84-99 sites supplementing Appendix with economic data, application to exceedance probability-damage curves, expected annual damage estimates, and methodology used in the report.
* Became lead regional economist for Air Force MILCON projects with formal training in Decision Support Analysis by the Air Force Financial Management Center of Expertise and adding an Army MILCON project using EconPACK software. Locations added: Edwards AFB and Yuma Proving Ground.
* Completed the following PROSPECT courses:
  + USACE Economic Analysis
  + Leadership Development Program (Level 1)
  + Risk Analysis in Water Resources Policy and Management

Economist – GS-07 CESPK June 2016 – June 2017

* Assisted in data preparation for the Lower Santa Cruz River flood risk management site damage economic analysis updating demographic information with census data and land usage and determining value through commodity prices for agricultural crops based on acreage for flood damage assessment using HEC-FDA to address regional economic development associated with the region and other social effects associated with flood risk.
* Supported Consequence Analysis Economic Update for New Hogan Dam focusing on incremental life loss based on breach and non-breach scenarios and developing breach parameters, modeling assumptions and discharges, and defining the area impacted by inundation with focus on population at risk, critical infrastructure, and economic losses.
* Pioneered Economic Analysis reports for United States Air Force MILCON projects determining justification through personal interviews, life cycle cost, benefit, uncertainty, and risk analysis using Air Force Financial Management Center of Expertise reporting products. Locations include: Nellis AFB and Creech AFB.
* Completed the following PROSPECT courses:
  + CW Project Development (PCC1)
  + Planning Essentials (PCC2)
  + Plan Formulation Capstone (PCC3)

Technical Skills

Disciplines: Economics, Statistics, Financial Management, & Computer Modeling

Programs: R & Python

Tools: ArcGIS, HEC-FDA, Levee Screening Tool, & EconPACK