

# Mark Joseph S. Hernandez, EIT, A.M. ASCE

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## Education

### University of Batangas

Bachelor of Science in Civil Engineering

- Dean's List from 2013 – 2015

Coursework: Building Design, Foundation Engineering, Prestressed Concrete Design, Reinforced Concrete Design, Steel Design, Theory

Batangas, Philippines

May 2019

## Experience

### CARLS Builder's Construction & Real Estate Company

Site/Office Engineer Intern

Batangas, Philippines

July 2017 – September 2017

- Evaluated construction equipment to ensure safety & reviewed housing project plan to guarantee work was followed accordingly
- Completed a bungalow floor plan along with its Structural Plan, Plumbing Plan, and Electrical Layout using AutoCAD and made an Architectural View via Sketchup to comply with the internship's final project
- Designed T&B and bedroom interiors of a project house utilizing Sketchup, rendered into 3D view, with results praised by the client

## Academic Projects

### Proposal of Three-Story Reinforced Concrete Commercial Building

2016 – 2018

- Analyzed and designed a structural plan (Wind and Seismic Analysis, Portal and Factor Method, MDM, Slabs, Beams, Columns, Footings) using the National Structural Code of the Philippines (NSCP) 2010 to certify building's serviceability and safety
- Developed a program in Excel to maximize the required manual calculations while reducing the time needed in finding adequate and economic measurements, sizes, and quantities

### Proposal of Steel-Reinforced Covered Court

2017 – 2018

- Led a team of 3 to manually design a steel-reinforced court that covered its truss members and steel columns using the National Structural Code of the Philippines (NSCP) 2001 & Association of Structural Engineers of the Philippines (ASEP) Steel Handbook Vol. 1

### Programming of Retrofitting by Flexural Strengthening using Carbon Fiber

2016 – 2017

- Led a team of 6 in researching how to retrofit singly reinforced concrete beams by flexural strengthening using carbon fiber reinforced polymer under the underlying codes and specifications of American Concrete Institute (ACI) 440.2R-08
- Designed an application using C# language to analyze structural beams and verify whether the designed serviceability, strength, and stability of the beam using the manufacturers' given carbon fiber reinforced polymer (CFRP) properties are adequate or not
- Assessed experimental tests comparing manually computed problems from Registered Civil Engineers against program-based calculations to verify the accuracy, with results showing no significant difference if rounding off was not taken into consideration

## Achievements

### Philippine Institute of Civil Engineers – University of Batangas Student Chapter

Senior Vice President

Batangas, Philippines

2016 – 2017

- Organized and led various institute activities (e.g., Engineering Field Trip and Seminar Training) for approximately 500 civil engineering students, enlarging their social and academic networks
- Spearheaded a committee to supervise 87 athletic civil engineering students for the regional sports festival, ranked 1<sup>st</sup> over-all

### The Westernian Advocate – The Official Student Publication of University of Batangas

Chief Layout Artist/Photojournalist

Batangas, Philippines

2016 – 2017

- Coordinated with 7 executive staff and 6 section editors to ensure all materials were up to date and adequately fit the layout
- Ranked 2<sup>nd</sup> on a regional level and 4<sup>th</sup> on a national level by competing in a 4-hour newspaper design and layout competition

### Checkmate – University of Batangas Chess Club

Chairman

Batangas, Philippines

2015 – 2016

- Accomplished fundraising along with other members and alumni amounting to 85,000php (around \$1,700) for the 'Human-sized Chess Board' project, spreading club's awareness & increased chess clinic attendance

## Skills

Adobe Photoshop | Adobe InDesign | ArcGIS | AutoCAD | Civil 3D | SketchUp | Microsoft Office | Fluent in Tagalog

## Additional Work Experience

### Whole Foods Market, INC.

Grocery Team Member

Santa Rosa, CA

2020 – Present

- Executed the duties and responsibilities effectively and was voted as the Team Member of the Quarter for April – June 2021, and Team Member of the Month for May 2021
- Collaborated in a team of 3 to maximize sales potential through adequate and proper storing, completing cycle counts and out-of-stock walks, and closing purchase orders while addressing the needs of customers in a timely and effective manner