

Fernando Berrospi

U.S. Green Card holder

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EDUCATION

Purdue University
B.S. in Industrial Engineering

December 2019
West Lafayette, IN

WORK EXPERIENCE

MS4M

Software Engineer

Aug. 2021 – Aug. 2022

Lima, Peru

- Collaborated in the overhaul of a facial point detection algorithm to improve the accuracy of a fatigue detection system from 27.91% to 87.10%.
- Determined the performance of a face detection machine learning model using an open-source tool to evaluate the mean Average Precision (mAP).
- Constructed an algorithm to identify the model with the optimal blink and yawn detection results to maximize the precision and sensitivity of the model.

CDC Gold Peru

Junior Software Developer

Jan. 2019 – July 2019

La Libertad, Peru

- Developed a k-means clustering algorithm to identify haul truck delays in the mining facilities.
- Designed a tracking algorithm to trace routes taken by water tank trucks saving the company over \$3000 per month.
- Upgraded haul truck scheduling efficiency by automating the process using an R script reducing the time spent on the scheduling process by 85%.
- Supervised a team to design and implement an innovative irrigation system saving the company over \$5000 per month.

PROJECTS

Sorgenia Energy Sharing Business Model

Innovation Consultant

Jan. 2018 – Aug. 2018

Milan, Italy

- Collaborated with a multicultural group of students to create an inventive solution for an Italian energy company.
- Engineered a feasible energy sharing business model for renewable energy using a design thinking approach.
- Developed augmented intercultural proficiencies including leadership, adaptability and communication skills.

Shortest Path Problem

Optimization Consultant

Aug. 2017 – Dec. 2017

West Lafayette, IN

- Designed greedy heuristic model to simulate vehicles' delivery routes under numerous circumstances.
- Developed an algorithm in R to perform constraint analysis, test different scenarios and map optimal solutions.
- Demonstrated effective planning and management skills to compile the formal report.

LEADERSHIP EXPERIENCE

College Mentors for Kids, Purdue University

Mentor

Aug. 2017 – Dec. 2018

West Lafayette, IN

- Cultivated relationships with young children to stimulate confidence, personal development and higher education.
- Engaged in various activities aimed at teaching kids about science, cultural diversity and community service.

SKILLS

- **Programming Languages:** Python, C, MATLAB, R, Java, SQL, Visual Basic for Applications (VBA).
- **Tools:** Git, PostgreSQL, Anaconda, TensorFlow, PyTorch, FastAI, Microsoft Power BI, Microsoft Excel, Bootstrap, HTML, CSS.
- **Language Skills:** Spanish (native), English (fluent), French (proficient), Italian (proficient).