## Carlos Mauricio Peredo, Ph.D.

Senior Researcher | Principal Investigator | Data Scientist

| PaleoPeredo@gmail.com   240-462-3056   <u>linkedin.com/in/carlos-mauricio-peredo</u> |   |  |  |  |
|--|---|--|--|--|
| Work   | Senior Research Scientist   2024–current  |  |  |  |
| Experience   | <ul> <li>Equity Research Team, Western Governors University</li> <li>Identified key metrics to evaluate the success of financial aid initiatives</li> <li>Designed and led pilot studies to test and refine strategies for optimizing financial aid distribution</li> </ul> |  |  |  |
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|  |   |  |  |  |
|  | <ul> <li>Developed predictive models with metrics to evaluate and prioritize equity in<br/>overall financial aid strategy and decision making</li> </ul>  |  |  |  |
|  | <b>Principal Investigator &amp; Senior Researcher</b>   2022–2024<br>Peredo Comparative Morphology Lab, Miami University  |  |  |  |
|  |   |  |  |  |
|  | • Supervised a team of 6–10 junior scientists working on technical publications   |  |  |  |
|  | <ul> <li>Led an international collaboration that brought local science to stakeholders<br/>to inform corporate and public policy initiatives</li> </ul>   |  |  |  |
|  | <ul> <li>Created a predictive model combining Neural Networks and Random Forests<br/>to solve problems with fragmentary datasets</li> </ul>   |  |  |  |
|  | <ul> <li>Conceived and implemented Computer Vision algorithms to optimize<br/>inventory management protocols</li> </ul>   |  |  |  |
|  | <b>Principal Investigator</b>   2019–2022<br>Peredo Comparative Morphology Lab, University of Michigan  |  |  |  |
|  |   |  |  |  |
|  |   | Designed innovative research methodologies |  |  |
|  | Transformed datasets into educational museum exhibits for all ages  |  |  |  |
|  | Research Scientist   2014–2019  |  |  |  |
|  | Smithsonian NMNH & George Mason University  |  |  |  |
|  | • Team lead of a science diplomacy initiative for a federal agency  |  |  |  |
|  | <ul> <li>Developed and implemented standardized protocol for collecting, processing,<br/>and future-proofing 3D digital datasets</li> </ul>   |  |  |  |
|  | • Consulted for science educational broadcasting which aired on PBS and BBC   |  |  |  |
| Education  | • Ph.D., Environmental Science and Public Policy, George Mason University   |  |  |  |
|  | • M.S., Environmental Science and Public Policy, George Mason University  |  |  |  |
|  | • <b>B.S.</b> , Biology, Seton Hill University  |  |  |  |
| Research &   | • 20 peer reviewed research articles (11 first authored)  |  |  |  |
| Publications   | <ul> <li>&gt; \$500,000 USD awarded in external funding</li> </ul>  |  |  |  |
|  | 22 conformance abotre etc (10 first outborned)  |  |  |  |

23 conference abstracts (16 first authored)

## Carlos Mauricio Peredo, Ph.D.

Professor | Principal Investigator | Data Scientist

| PaleoPer                 | redo@gmail.com   240-462-305   | 56   <u>linkedin.com/in/carlos-</u>   | mauricio-peredo   |
|--------------------------|--|---|---|
| Skills                   | <ul> <li>Data Science &amp; Artificia</li> <li>R &amp; RStudio</li> <li>Python &amp; Jupyter<br/>Notebooks</li> <li>SQL &amp; Databricks</li> <li>Git &amp; GitHub</li> </ul>                      | <ul> <li>Intelligence</li> <li>Computer Vision</li> <li>Neural Networks<br/>(NNAs)</li> <li>Natural Language<br/>Processing (NLPs)</li> </ul>       | <ul> <li>Random Forest<br/>Classifiers</li> <li>Predictive Modeling</li> </ul>      |
|                          | <ul> <li>Research &amp; Statistics</li> <li>Quantitative Analytics</li> <li>Experimental Design</li> <li>Mixed Methods<br/>Research</li> <li>A/B Testing</li> </ul>                                | <ul> <li>Descriptive Statistics</li> <li>Inferential Statistics</li> <li>Bayesian Inference</li> <li>Causal Inference</li> <li>Qualtrics</li> </ul> | <ul><li>SAS Analytics Software</li><li>IBM SPSS Statistics</li><li>MATLAB</li></ul> |
|                          | <ul> <li>Data Visualization &amp; Mo</li> <li>Tableau</li> <li>Power BI</li> <li>Qualtrics</li> <li>LucidChart</li> </ul> Languages <ul> <li>English (native)</li> <li>Spanish (native)</li> </ul> | <ul> <li>Mimics</li> <li>Artec Studio</li> <li>Autodesk Fusion360</li> <li>Maya</li> </ul>  | <ul><li>Adobe Creative Suite</li><li>Microsoft Suite</li></ul>                      |
| Certifications           | Inclusive Workplace  | of Human-Sourced Datase<br>Management   Miami Univ<br>Responder   Miami Universi  | ersity  |
| Leadership<br>Philosophy | I believe in creating cl<br>Let's cut through the noise<br>I believe data have con<br>Behind every dataset are<br>I believe in putting pe  | alculated risks. Analytics help<br><b>arity from chaos.</b><br>e, tell a compelling story, and<br><b>ntext.</b><br>real people. Let's take care to  | d blaze the path forward.<br>o act with ethics and integrity.                       |