

First Paper Essentials

Cómo escribir tu primer artículo científico

M.Sc. Giorgio Morales Luna

Gianforte School of Computing
Montana State University

Sobre mí

- Ingeniero Mecatrónico (2010-2015) egresado de la UNI
- Trabajé como Investigador en Visión Computacional en el INICTEL-UNI (2014-2019)
- En Fall 2019, empecé mi programa de doctorado en Computer Science en Montana State University (MSU)
- Máster en Computer Science (2019-2021) por MSU
- Trabajé como Teaching Assistant (2019-2020) en MSU
- Actualmente, trabajo como Research Assistant
- Pertenezco al Numerical Intelligent System Laboratory (NISL)



<https://www.cs.montana.edu/users/moralesluna/>

Mis Publicaciones

PUBLICATIONS

Journal Articles

- Giorgio Morales, John W. Sheppard, Riley Logan, and Joseph Shaw, "Hyperspectral Dimensionality Reduction Based on Inter-Band Redundancy Analysis and Greedy Spectral Selection," *Remote Sensing*, 13(18), 3649, September 2021.
- Giorgio Morales, John W. Sheppard, Bryan Scherrer, and Joseph Shaw, "Reduced-Cost Hyperspectral Convolutional Neural Networks," *Journal of Applied Remote Sensing*, 14(3), 036519 (2020), September 2020.
- Samuel Huamán, Antero Castro, Giorgio Morales, and Joel Telles, "Regression Models between Active Sensor-Measured NDVI and UAV-Acquired Multispectral Images with Positioning Uncertainty," *IEEE Latin America Transactions*, 17(06), pp. 1055-1067, June 2019.
- Giorgio Morales, Guillermo Kemper, Grace Sevillano, Daniel Arteaga, Ivan Ortega, Joel Telles, "Automatic Segmentation of Mauritia flexuosa in Unmanned Aerial Vehicle (UAV) Imagery Using Deep Learning," *Forests*, 2018(9), 736, November 2018.

Refereed Conference Papers

- Giorgio Morales, John Sheppard, Riley Logan, and Joseph Shaw, "Hyperspectral Band Selection for Multispectral Image Classification with Convolutional Networks," *Proceedings of the IEEE International Joint Conference on Neural Networks (IJCNN)*, July 2021.
- Marco Apolinario, Samuel Huamán Bustamante, Giorgio Morales, and Daniel Díaz, "Estimation of 2D Velocity Model using Acoustic Signals and Convolutional Neural Networks," *Proceedings of the IEEE XXVI International Conference on Electronics, Electrical Engineering and Computing (INTERCON)*, Lima, Peru, August 2019.
- Giorgio Morales, Alejandro Ramírez, and Joel Telles, "End-to-end Cloud Segmentation in High-Resolution Multispectral Satellite Imagery Using Deep Learning," *Proceedings of the IEEE XXVI International Conference on Electronics, Electrical Engineering and Computing (INTERCON)*, Lima, Peru, August 2019.
- Giorgio Morales, Samuel Huamán, and Joel Telles, "Shadow Removal in High-Resolution Satellite Images Using Conditional Generative Adversarial Networks," *Proceedings of the International Conference on Information Management and Big Data (SIMBig)*, Lima, Peru, February 2019.
- Giorgio Morales, Itamar Salazar, Joel Telles, and Daniel Díaz, "Detecting Violent Robberies in CCTV Videos Using Deep Learning," *Proceedings of the Artificial Intelligence Applications and Innovations (AIAI)*, Crete, Greece, May 2019.
- Giorgio Morales, Daniel Arteaga, Samuel Huamán, Joel Telles, and Walther Palomino, "Shadow Detection in High-Resolution Multispectral Satellite Imagery Using Generative Adversarial Networks," *Proceedings of the IEEE XXV International Conference on Electronics, Electrical Engineering and Computing (INTERCON)*, Lima, Peru, August 2018.

- Walther Palomino, Giorgio Morales, Samuel Huamán, and Joel Telles, "PETEFA: Geographic Information System for Precision Agriculture," *Proceedings of the IEEE XXV International Conference on Electronics, Electrical Engineering and Computing (INTERCON)*, Lima, Peru, August 2018.
- Giorgio Morales, Samuel Huamán, and Joel Telles, "Cloud Detection in High-Resolution Multispectral Satellite Imagery Using Deep Learning," *Proceedings of the International Artificial Neural Networks and Machine Learning (ICANN)*, Rhodes, Greece, October 2018.
- Giorgio Morales, Samuel Huamán, and Joel Telles, "Cloud Detection for PERUSAT-1 Imagery Using Spectral and Texture Descriptors, ANN, and Panchromatic Fusion," *Proceedings of the 3rd Brazilian Technology Symposium (BTSym)*, Campinas, Brazil 2017.
- Giorgio Morales, Daniel Arteaga, Marta Orduna, Guillermo Kemper, and Joel Telles, "An Algorithm for the Improvement of Aerial Images Acquired Via UAV for the Improvement of the Detection of Young Mauritia Flexuosa Palms in the Peruvian Amazon," *Proceedings of the 1st Brazilian Technology Symposium (BTSym)*, Campinas, Brazil 2015.

Invited Papers

- Giorgio Morales and John W. Sheppard, "Two-dimensional Deep Regression for Early Yield Prediction of Winter Wheat," *Proceedings of SPIE Future Sensing Technologies*, November 2021.

Non-Refereed Conference Papers

- Giorgio Morales, John Sheppard, Amy Peerlinck, Paul Hegedus, and Bruce Maxwell, "Generation of Site-specific Nitrogen Response Curves for Winter Wheat using Deep Learning," to appear in the *Proceedings of the 15th International Conference on Precision Agriculture*, Minneapolis, Minnesota, United States, June 2022.
- Amy Peerlinck, Giorgio Morales, John Sheppard, Paul Hegedus, and Bruce Maxwell, "Optimizing Nitrogen Application to Maximize Yield and Reduce Environmental Impact in Winter Wheat Production," to appear in the *Proceedings of the 15th International Conference on Precision Agriculture*, Minneapolis, Minnesota, United States, June 2022.
- Bruce Maxwell, Paul Hegedus, Sasha Loewen, Hannah Duff, John Sheppard, Amy Peerlinck, Giorgio Morales, Anton Bekkerman, "Decision support from on-field precision experiments," to appear in the *Proceedings of the 15th International Conference on Precision Agriculture*, Minneapolis, Minnesota, United States, June 2022.

Theses

- Giorgio Morales, "Towards Reduced-Cost Hyperspectral and Multispectral Image Classification," MS thesis, Gianforte School of Computing, Montana State University, 2021.
- Giorgio Morales, "Development of a Remote Sensing Software Oriented to the Identification and Automatic Measurement of Mauritia Flexuosa plantations in the Peruvian Amazon using Aerial Images Acquired Via UAV and Digital Image Processing Algorithms," BS thesis, Department of Mechatronic Engineering, Universidad Nacional de Ingeniería, 2017.

CV académico →



Por qué publicar

- Mejora el perfil profesional
- Fomenta la colaboración intra e inter-disciplinaria
- Aumenta las probabilidades de ser aceptado en becas, programas de posgrado, concursos de financiamiento, etc.
- Genera propiedad intelectual
- Difunde el conocimiento científico



Before we start...

- La prioridad es escribir en inglés:
 - Mayor alcance y audiencia
 - Congresos peruanos requieren artículos en inglés
 - Las revistas y congresos de mayor calidad publican en inglés
- LaTeX es ideal para escribir papers:
 - Acelera el proceso de redacción
 - No es necesario saber “programar en LaTeX”
 - El usuario no debe preocuparse por el formato del paper, sólo del contenido
 - La bibliografía se puede generar automáticamente



Conference Papers vs. Journal Papers

	Journal Paper	Conference Paper
# de páginas	Generalmente, no tiene límite	~ 8 páginas (IEEE format) o ~ 15 páginas
Revisión	Peer-reviewed	Algunas no son peer-reviewed
Reputación	Impact factor (IF) / Q1, Q2, Q3, Q4	Impact factor (IF)
Presentación oral	No	Sí
Continuidad	> 2 volúmenes al año	1 evento cada año o cada 2 años
Aceptación	Puede tardar años	< 5 meses
Costo	Algunas revistas son gratuitas	Sí

Overleaf

- Editor LaTeX online (www.overleaf.com).
- Gratuito. Puede asociarse a cuentas de OrCID, Google, IEEE, etc.
- Aquellos que tengan una suscripción IEEE pueden gozar de los beneficios de Overleaf Premium.

The screenshot shows the Overleaf web interface. At the top, there's a navigation bar with links for Features & Benefits, Templates, Plans & Pricing, Help, Projects, and Account. The left sidebar has a 'New Project' button and a list of project categories: All Projects, Your Projects, and Shared with you. The main content area displays a table of projects with columns for Title, Owner, and Last Modified. A search bar is at the top of the project list. A red box highlights a notification in the top right corner that reads: 'You're using Overleaf Premium. You are on the Professional plan as a member of a group subscription, IEEECollabratec. Click to find out how you could benefit from Overleaf premium features!'.

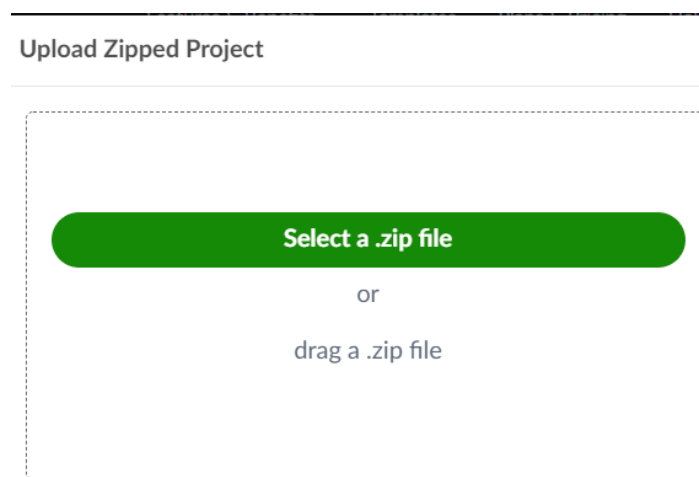
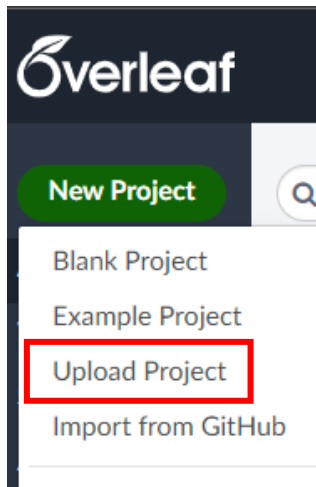
Title	Owner	Last Modified
Giorgio Morales Academic CV	You	2 months ago by You
Prediction Intervals NewIDB 2022	You	2 months ago by You

Overleaf

- Conseguir la plantilla LaTeX que usa el congreso/journal elegido
- Overleaf contiene las plantillas más usadas:
 - Ej.: Si se publicará en alguna revista o congreso de IEEE:
<https://www.overleaf.com/org/ieee>
 - Ej.: Si se publicará en alguna revista o congreso de Springer:
<https://www.overleaf.com/gallery/tagged/springer>
- Siempre verificar el formato requerido en la página más reciente del congreso o revista (en “Call for Papers”, “Author instructions” o “Submission guidelines”). Ej.: NeurIPS <https://nips.cc/>

Overleaf

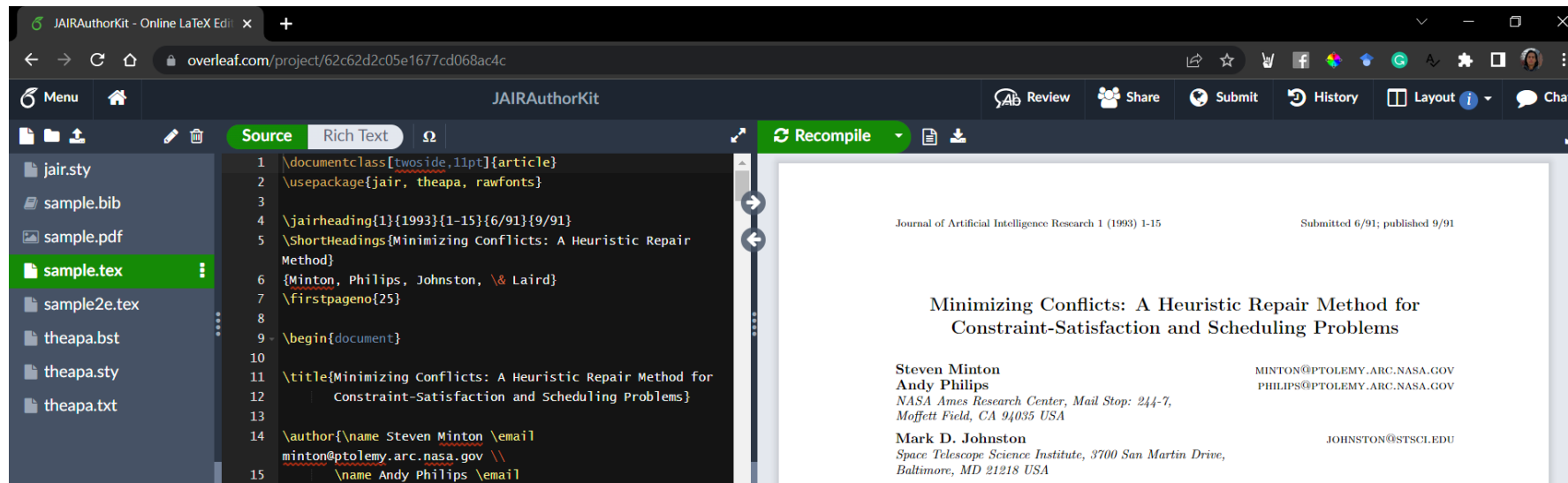
- En caso de que no haya una plantilla predefinida en Overleaf:
 - Si se brinda un ZIP folder: <https://jair.org/index.php/jair/authorinstrs>



- Si se brindan archivos .tex y .sty: <https://neurips.cc/>

Overleaf

- En caso de que no haya una plantilla predefinida en Overleaf:
 - Si se brinda un ZIP folder: <https://jair.org/index.php/jair/authorinstrs>



- Si se brindan archivos .tex y .sty: <https://neurips.cc/>

Overleaf

- Escribir cada oración en una línea separada. Así se puede ubicar el “código” correspondiente fácilmente dando doble click en el texto del PDF.
- Para “comentar” una línea, escribir % al comienzo. Para comentar cierta parte del texto, seleccionar y presionar ctrl+/
- Para papers cortos sin imágenes, activar la opción auto-compile.

Estructura: Abstract



Citation: Morales, G.; Sheppard, J.W.; Logan, R.D.; Shaw, J.A. Hyperspectral Dimensionality Reduction Based on Inter-Band Redundancy Analysis and Greedy Spectral Selection. *Remote Sens.* **2021**, *1*, 0. <https://doi.org/>

Communicated by: Wai Chi Fang,
Sabah Mohammed and Mincong
Tang

Received: 28 July 2021

Accepted: 9 September 2021

Published:

Abstract: Hyperspectral imaging systems are becoming widely used due to their increasing accessibility and their ability to provide detailed spectral responses based on hundreds of spectral bands. However, the resulting hyperspectral images (HSIs) come at the cost of increased storage requirements, increased computational time to process, and highly redundant data. Thus, dimensionality reduction techniques are necessary to decrease the number of spectral bands while retaining the most useful information. Our contribution is two-fold: First, we propose a filter-based method called interband redundancy analysis (IBRA) based on a collinearity analysis between a band and its neighbors. This analysis helps to remove redundant bands and dramatically reduces the search space. Second, we apply a wrapper-based approach called greedy spectral selection (GSS) to the results of IBRA to select bands based on their information entropy values and train a compact convolutional neural network to evaluate the performance of the current selection. We also propose a feature extraction framework that consists of two main steps: first, it reduces the total number of bands using IBRA; then, it can use any feature extraction method to obtain the desired number of feature channels. We present classification results obtained from our methods and compare them to other dimensionality reduction methods on three hyperspectral image datasets. Additionally, we used the original hyperspectral data cube to simulate the process of using actual filters in a multispectral imager.

Keywords: hyperspectral feature extraction; band selection; hyperspectral classification; multispectral classification

150 - 250 palabras
(verificar siempre)

Estructura: Abstract



Citation: Morales, G.; Sheppard, J.W.; Logan, R.D.; Shaw, J.A. Hyperspectral Dimensionality Reduction Based on Inter-Band Redundancy Analysis and Greedy Spectral Selection. *Remote Sens.* **2021**, *1*, 0. <https://doi.org/>

Communicated by: Wai Chi Fang, Sabah Mohammed and Mincong Tang

Received: 28 July 2021

Accepted: 9 September 2021

Published:

Abstract: Hyperspectral imaging systems are becoming widely used due to their increasing accessibility and their ability to provide detailed spectral responses based on hundreds of spectral bands.

However, the resulting hyperspectral images (HSIs) come at the cost of increased storage requirements, increased computational time to process, and highly redundant data. Thus, dimensionality reduction techniques are necessary to decrease the number of spectral bands while retaining the most useful information.

Our contribution is two-fold: First, we propose a filter-based method called interband redundancy analysis (IBRA) based on a collinearity analysis between a band and its neighbors. This analysis helps to remove redundant bands and dramatically reduces the search space. Second, we apply a wrapper-based approach called greedy spectral selection (GSS) to the results of IBRA to select bands based on their information entropy values and train a compact convolutional neural network to evaluate the performance of the current selection. We also propose a feature extraction framework that consists of two main steps: first, it reduces the total number of bands using IBRA; then, it can use any feature extraction method to obtain the desired number of feature channels.

We present classification results obtained from our methods and compare them to other dimensionality reduction methods on three hyperspectral image datasets. Additionally, we used the original hyperspectral data cube to simulate the process of using actual filters in a multispectral imager.

Keywords: hyperspectral feature extraction; band selection; hyperspectral classification; multispectral classification



Contexto



Problema



Contribución



Resultados /
Conclusión

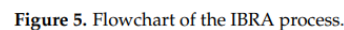
Estructura: Introducción

- Similitudes con el abstract:
 - Contexto
 - Problemática
 - Propuesta / Hipótesis / Contribución
- Diferencias con el abstract:
 - Generalmente, más de una página
 - Incluye citas e hipervínculos
 - Opcional: Flowchart
 - Opcional: Distribución del paper

Estructura: Related Work

- En el caso de conference papers, puede formar parte de la introducción.
- Es una lista de trabajos pasados relacionados específicamente a la contribución o método propuestos.
- Los trabajos citados están normalmente mencionados en orden cronológico.
- Resaltar contribuciones y limitaciones de cada método.

- Es la sección principal del paper
- Crear subsecciones de modo que cada componente del método sea claramente identificable
- Evitar explicaciones engorrosas. En caso que una parte del método tenga muchos pasos, reportarlos en forma de algoritmos y/o ilustraciones:



```

1: function INTERBANDREDUNDANCY( $\theta$ )
2:    $d_{left} \leftarrow []$ 
3:    $d_{right} \leftarrow []$ 
4:    $table \leftarrow \text{zeros}(N, N)$  // creates an  $N \times N$  matrix of zeros
5:   for all  $band \in (1, N)$  do
6:     // Check left side
7:      $t \leftarrow 1$ 
8:      $vif \leftarrow \infty$ 
9:     while  $(vif > \theta) \wedge ((band - t) > 0)$  do
10:      if  $table[band, band - t] = 0$  then
11:         $table[band, band - t] = \text{getVIF}(band, band - t)$ 
12:         $table[band - t, band] = table[band, band - t]$ 
13:         $vif = table[band, band - t]$ 
14:         $t \leftarrow t + 1$ 
15:      $d_{left} \leftarrow [d_{left}, 1]$ 
16:     // Check right side
17:      $t \leftarrow 1$ 
18:      $vif \leftarrow \infty$ 
19:     while  $(vif > \theta) \wedge ((band - t) < N)$  do
20:      if  $table[band, band + t] = 0$  then
21:         $table[band, band + t] = \text{getVIF}(band, band + t)$ 
22:         $table[band + t, band] = table[band, band + t]$ 
23:         $vif = table[band, band + t]$ 
24:         $t \leftarrow t + 1$ 
25:      $d_{right} \leftarrow [d_{right}, 1]$ 
26:    $d \leftarrow |d_{left} - d_{right}|$ 
27:   preselection  $\leftarrow \text{getLocalMinima}(d)$ 
28:   return preselection

```

Ecuaciones

- Buena práctica: Enumerar sólo las ecuaciones que se referencien en el texto del paper

```
\begin{equation}
\min_{\theta} \mathcal{L}_1 = \min_{\theta} (1 - \text{PICP})^2.
\label{eq:OBJ1}
\end{equation}
```

```
206 \begin{equation*}
207 \text{MPIW}_{\text{capt}} = \frac{1}{\sum_i k_i + \epsilon} \sum_{i=1}^N (\hat{y}_i^u - \hat{y}_i^{\ell}) k_i,
208 \end{equation*}
```

```
214 Hence, the calculated gradients of the loss function will force
the weights of the NN to remain in the state where  $\forall i, k_i = 0$ , which contradicts the minimization objective in
Eq.~\ref{eq:OBJ1}.
```

Thus, our first optimization objective consists of minimizing the penalty \mathcal{L}_1 , which is defined as:

$$\min_{\theta} \mathcal{L}_1 = \min_{\theta} (1 - \text{PICP})^2. \quad (4)$$

The HQ principle suggests that the width of the prediction intervals should be minimized as long as they capture the target observation value (i.e., if $k_i = 1$). Thus, Pearce et al. [8] considered the mean prediction interval width of captured points ($\text{MPIW}_{\text{capt}}$) as part of the loss function:

$$\text{MPIW}_{\text{capt}} = \frac{1}{\sum_i k_i + \epsilon} \sum_{i=1}^N (\hat{y}_i^u - \hat{y}_i^{\ell}) k_i,$$

where ϵ is a small number used to avoid possibly dividing by

...

NN to remain in the state where $\forall i, k_i = 0$, which contradicts the minimization objective in Eq. 4.

Figuras y tablas

- Siempre deben colocarse al comienzo de la página
- Deben ubicarse lo más cerca posible al texto donde son mencionadas (en la misma página o después)
- Usar el paquete “\usepackage{graphicx}” dentro de “documentclass” del .text file

Ubica la imagen en el “top” de la página

Se puede declarar el “height” o “width” de la imagen en cm

Nombre de la imagen

```
531
532 \begin{figure}[!t]
533 \centering
534 \includegraphics[width =
535 \textwidth]{images/yield_comparison.jpg}
536 \caption{Yield estimation and uncertainty maps
537 comparison.}
538 \label{fig:yield}
539 \end{figure}
540
541 \section{Discussion} \label{discussion}
```

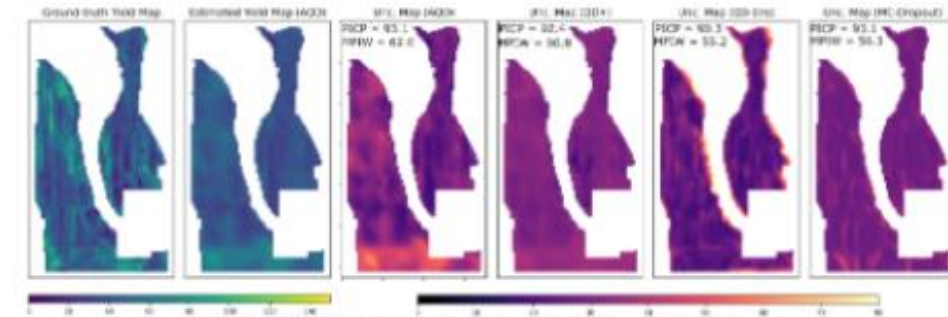


Figure 3: Yield estimation and uncertainty maps comparison.

244 PI generation method. Specifically, we focused on the crop yield prediction problem, which is one of
245 the main tasks of precision agriculture. Accurate and reliable crop yield prediction enables farmers to
246 make informed management decisions, such as determining the nitrogen fertilizer rates needed in
247 specific regions of their field to maximize profit while minimizing environmental impact 14 101

Figuras y tablas

- La forma más fácil de crear tablas es usando <https://www.tablesgenerator.com/>
- Normalmente, el caption (descripción) va debajo de la tabla
- En el caso de IEEE papers, el caption y numeración va encima. Verificar siempre en “Author guidelines”

Redacción

- Oraciones cortas y simples de entender. Párrafos de 4 oraciones en promedio
- Los signos de puntuación pueden cambiar la intención/idea de la oración
- El uso de adverbios y preposiciones permite conectar ideas de distintas oraciones
- Ideas complicadas deben separarse en oraciones contiguas



NO

(...) The inference process is generally intractable and involves marginalization over the weights and sampling processes such as Markov chain Monte Carlo (MCMC) can be computationally prohibitive, which is why approximate solutions have been formulated using variational inference (VI) [18]; however, Wu et al. [19] argued that VI approaches are fragile since they require careful initialization and tuning. (...)



YES

*(...) The inference process involves marginalization over the weights, which in general is intractable, and sampling processes such as Markov chain Monte Carlo (MCMC) can be computationally prohibitive. **Thus**, approximate solutions have been formulated using variational inference (VI) [18]. **However**, Wu et al. [19] argued that VI approaches are fragile since they require careful initialization and tuning. (...)*

Estructura: Experimental Results

- Se explica cómo se llevaron a cabo los experimentos
- La explicación debe ser clara y reproducible (si es posible, incluir repositorio Github)
- Es recomendable usar open-access datasets y datasets sintéticos
- Si el objetivo del paper es proponer un método que mejore el estado del arte, se deben incluir por lo menos 3 métodos de comparación
- Las comparaciones deben ser repetitivas (ej. Cross-validation) y se deben usar múltiples métricas
- Se llega a la conclusión de que un método es mejor que otro llevando a cabo pruebas de hipótesis estadísticas (ej. t-test, permutation test, F-test)

Estructura: Discussion

- La sección de Results sólo reporta los resultados obtenidos
- La sección de Discussion, en cambio, analiza los resultados y compara exhaustivamente los métodos usados en la investigación
- En esta sección se comprueba si la hipótesis inicial es válida o no
- Se pueden referenciar las tablas, figuras, ecuaciones y conceptos previamente reportados para explicar a detalle ciertos comportamientos

Estructura: Conclusions

- Enfatizar cuál es la importancia de esta investigación (no repetir frases)
- No usar citas
- No es un resumen
- ¿Qué se aprendió de la investigación realizada? ¿Se comprobó la hipótesis inicial?
- ¿Hubo alguna limitación? ¿Cuál es el siguiente paso de esta investigación (future work)? ¿Qué se espera mejorar?

Estructura: References

- Conference paper: 20 – 30 citas
- Journal paper: > 40 citas
- Métodos de otros autores deben citarse, a menos que sean ampliamente reconocidos (ej. PCA de 1901)
- Ideas o postulados de otros autores también deben ser citados
- Los textos no deben ser copiados literalmente o vagamente parafraseados. En casos de frases célebres, citar usando comillas

Citaciones con BibTex

- Crear un archivo llamado “references.bib” en el proyecto Overleaf que será usado para guardar todas las citas en formato bibtex

Add Files

New File	File Name
Upload	references.bib
From Another Project	

- Declarar archivo bibtex en el .tex file (después de Conclusiones)

```
\bibliographystyle{plain}  
\bibliography{references}
```

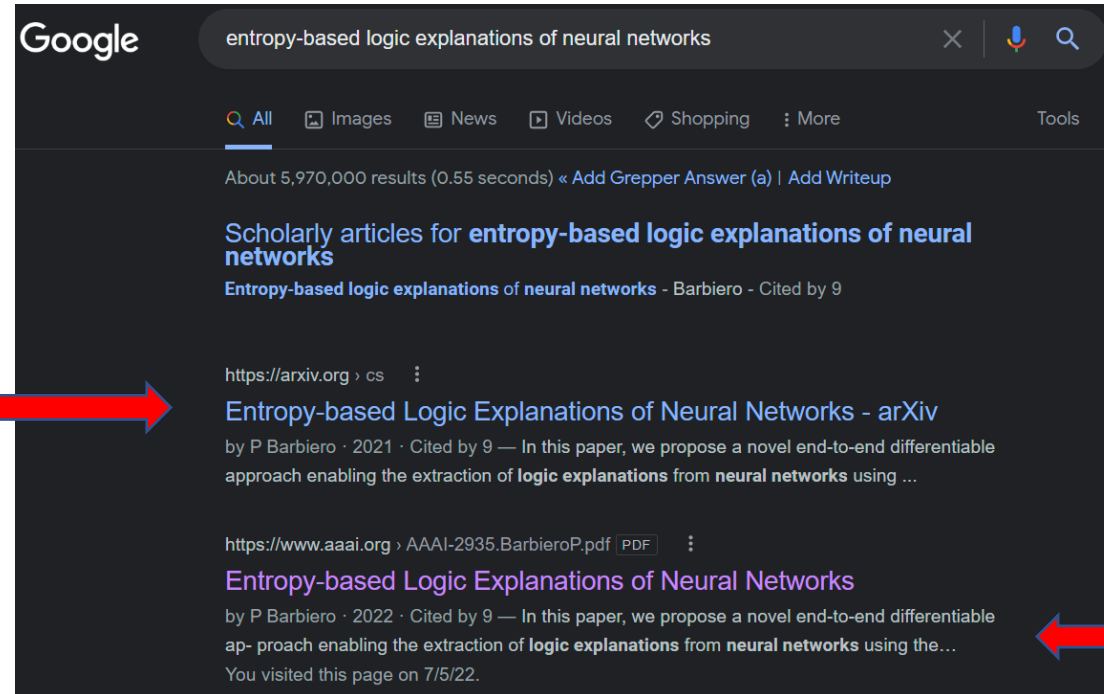
```
\bibliographystyle{IEEEtran}  
\bibliography{references}
```

Para publicaciones IEEE

Citaciones con BibTex

- Buscar la página donde el artículo a citar fue publicado
- Ej. “Entropy-Based Logic Explanations of Neural Networks”

Evitar citar pre-prints
(arxiv, Researchgate,
etc.)



Usar las versiones
publicadas

Citaciones con BibTex

- Buscar la opción “Cite” o “How to cite”
- Descargar el archivo Bibtex.
- Si hay la opción, descargar sin abstract

```
@article{Barbiero_Ciravegna_Giannini_Lió_Gori_Melacci_2022,  
  title={Entropy-Based Logic Explanations of Neural Networks},  
  volume={36},  
  url={https://ojs.aaai.org/index.php/AAAI/article/view/20551},  
  DOI={10.1609/aaai.v36i6.20551},  
  abstractNote={Explainable artificial intelligence has rapidly emerged since  
lawmakers have started requiring interpretable models for safety-critical domains.  
Concept-based neural networks have arisen as explainable-by-design methods as they  
leverage human-understandable symbols (i.e. concepts) to predict class memberships.  
However, most of these approaches focus on the identification of the most relevant  
concepts but do not provide concise, formal explanations of how such concepts are  
leveraged by the classifier to make predictions. In this paper, we propose a novel  
end-to-end differentiable approach enabling the extraction of logic explanations  
from neural networks using the formalism of First-Order Logic. The method relies on  
an entropy-based criterion which automatically identifies the most relevant concepts.  
We consider four different case studies to demonstrate that: (i) this entropy-based  
criterion enables the distillation of concise logic explanations in safety-critical  
domains from clinical data to computer vision; (ii) the proposed approach outperforms  
state-of-the-art white-box models in terms of classification accuracy.},  
  number={6},  
  journal={Proceedings of the AAAI Conference on Artificial Intelligence},  
  author={Barbiero, Pietro and Ciravegna, Gabriele and Giannini, Francesco and Lió,  
Pietro and Gori, Marco and Melacci, Stefano}, year={2022}, month={Jun.}, pages={6046-6054} }
```

Borrar URL, abstract,
DOI, ISSN, publisher

How to Cite

Barbiero, P., Ciravegna, G., Giannini, F., Lió, P., Gori, M., & Melacci, S. (2022). Entropy-Based Logic Explanations of Neural Networks. *Proceedings of the AAAI Conference on Artificial Intelligence*, 36(6), 6046-6054. <https://doi.org/10.1609/aaai.v36i6.20551>

More Citation Formats

ACM

ACS

APA

ABNT

Chicago

Harvard

IEEE

MLA

Turabian

Vancouver

Download Citation

Endnote/Zotero/Mendeley (RIS)

BibTeX



Citaciones con BibTeX

- Pegar el texto bibtex en la sección de referencias en Overleaf
- En el archivo .tex se puede citar cualquier artículo presente en references.bib usando el comando `\cite{nombre_del_artículo}`.

```
bare_conf.tex 1 @article{logic_explanations,  
references.bib 2 title={Entropy-Based Logic Explanations of Neural Networks},  
3 volume={36},  
4 number={6},  
5 journal={Proceedings of the AAAI Conference on Artificial Intelligence},  
author={Barbiero, Pietro and Ciravegna, Gabriele and Lió, Pietro and Gori, Marco and Melacci, Stefano},  
6 year={2022}, month={Jun.}, pages={6046-6054} }
```

```
bare_conf.tex 402 % NO \IEEEPARSTART  
403 This demo file is intended to serve as a ``starter file''  
404 for IEEE conference papers produced under \LaTeX\ using  
405 IEEEtran.cls version 1.8b and later.  
406  
407 This is a really cool reference~\cite{lo}  
408 \cite{logic explanations} reference  
409 % You must have at least 2 lines of text in the text area  
Press CTRL-Space to Search
```

I. INTRODUCTION

This demo file is intended to serve as a “starter file” for IEEE conference papers produced under L^AT_EX using IEEEtran.cls version 1.8b and later.

This is a really cool reference [1]

I wish you the best of success.

mds

August 26, 2015

A. Subsection Heading Here

Subsection text here.

1) Subsubsection Heading Here: Subsubsection text here.

II. CONCLUSION

The conclusion goes here.

ACKNOWLEDGMENT

The authors would like to thank...

REFERENCES

- [1] P. Barbiero, G. Ciravegna, F. Giannini, P. Lió, M. Gori, and S. Melacci, “Entropy-based logic explanations of neural networks,” *Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 36, no. 6, pp. 6046–6054, Jun. 2022.

Ética

- Publicar sólo cuando se tienen resultados, opiniones, o métodos que aportarán al conocimiento colectivo
- La publicación debe ser original y significativamente distinta a trabajos existentes
- El plagio es fácilmente detectable. Las consecuencias son severas
- La manipulación de data (tanto de “inputs” como “outputs”) con el fin de hacer el paper más atractivo es también detectable
- Sólo considerar como coautores a aquellos que aportaron significativamente en la investigación y/o redacción del paper

¡Gracias!

Contacto: 



giorgio-morales



<https://www.cs.montana.edu/users/moralesluna/>

