# Article information:

Electronics | Free Full-Text | Recent Advances in Pulse-Coupled Neural Networks with Applications in Image Processing
<https://www.mdpi.com/2079-9292/11/20/3264>

# Article summary:

1. This paper reviews recent advances in pulse-coupled neural networks (PCNNs) and their applications in image processing.

2. Research aims with respect to PCNN-derived models can be divided into three categories: reducing manual parameters, better real cortex imitation performance, and combining them with other methodologies.

3. PCNN has been widely used in the image processing field due to its outstanding information extraction ability.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy as it provides a comprehensive review of recent advances in pulse-coupled neural networks (PCNNs) and their applications in image processing. The authors provide a detailed overview of the research aims related to PCNN-derived models, as well as an extensive review of the applications of these models in image processing. Furthermore, the authors provide a general framework for the state of the art and a better understanding of PCNNs with applications in image processing.

The article does not appear to have any biases or one-sided reporting, as it presents both sides equally and does not make any unsupported claims or missing points of consideration. Additionally, there is no promotional content or partiality present in the article, nor are any risks noted that could potentially arise from using PCNNs for image processing purposes. All claims made by the authors are supported by evidence provided throughout the text, and all counterarguments are explored thoroughly. Therefore, this article can be considered reliable and trustworthy overall.

# Topics for further research:

* Pulse-Coupled Neural Networks (PCNNs) applications
* PCNNs for image segmentation
* PCNNs for image classification
* PCNNs for image denoising
* PCNNs for image restoration
* PCNNs for image recognition

# Report location:

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