

# Pedro Ribeiro Mendes Júnior

Institute of Computing (IC)

University of Campinas (Unicamp)

Av. Albert Einstein, 1251, Campinas, SP, 13083-852, Brazil

Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB)

Politecnico di Milano

Via Ponzio 34/5, 20133, Città Studi, Milano, Italia

Phone: +39 02 2399 9653

Emails: [pedrormjunior@gmail.com](mailto:pedrormjunior@gmail.com) • [pedro.junior@ic.unicamp.br](mailto:pedro.junior@ic.unicamp.br)

URL: [pedrormjunior.github.io](https://github.com/pedrormjunior)

ID Lattes: 4535492803722330

ORCID iD: 0000-0001-8086-018X

## Current position

2018–2019

Postdoctoral researcher

Image and Sound Processing Group

Dipartimento di Elettronica, Informazione e Bioingegneria

Politecnico di Milano

## Areas of specialization

Computer Science • Machine Learning • Open-Set Recognition • Digital Forensics

## Education

2008–2012

BSc in Computer Science, Federal University of Ouro Preto (UFOP), Brazil

2012–2014

MSc in Computer Science, University of Campinas (Unicamp), Brazil

2014–2018

PhD in Computer Science, University of Campinas (Unicamp), Brazil

## Complementary Education

2017–2018

Deep Learning Specialization (68 hours)

by [deeplearning.ai](https://deeplearning.ai), online on Coursera

2016–2017

Doctoral internship as a researcher assistant (1 year)

University of Colorado Colorado Springs (UCCS), with Prof. Terrance Boulton

2011

Short term course in Applied Functional Programming in Haskell (40 hours)

Utrecht University, Netherlands

## Languages

(Elementary • Basic • Intermediary • Advanced • Fluent or Native)

Portuguese	Native
English	Understanding Fluent • Speaking Advanced • Writing Advanced • Reading Advanced
Spanish	Understanding Intermediary • Speaking Intermediary • Writing Intermediary • Reading Advanced
Italian	Understanding Intermediary • Speaking Intermediary • Writing Basic • Reading Intermediary

## Grants, honors & awards

2016	<a href="#">Prêmio Inventores Unicamp</a> • Reitoria da Unicamp e Agência de Inovação Inova Unicamp
2015	<a href="#">Honored Papers 2015</a> • Elsevier Computers in Biology and Medicine

## Publications

### JOURNAL ARTICLES

2019	<b>Mendes Júnior, Pedro</b> ; Bondi, Luca; Bestagini, Paolo; Tubaro, Stefano; Rocha, Anderson, “ <a href="#">An in-depth study on open-set camera model identification</a> ”, <i>IEEE Access</i> . ( <b>Early Access</b> )
2018	Neira, Manuel; <b>Mendes Júnior, Pedro</b> ; Rocha, Anderson; Torres, Ricardo, “ <a href="#">Data-fusion techniques for open-set recognition problems</a> ”, <i>IEEE Access</i> . 6:21242–21265.
2018	Werneck, Rafael; de Almeida, Waldir; Stein, Bernardo; Pazinato, Daniel; <b>Mendes Júnior, Pedro</b> ; Penatti, Otávio; Rocha, Anderson; Torres, Ricardo, “ <a href="#">Kuaa: A unified framework for design, deployment, execution, and recommendation of machine learning experiments</a> ”, <i>Elsevier Future Generation Computer Systems</i> . 78(1):59–76.
2017	<b>Mendes Júnior, Pedro</b> ; Souza, Roberto; Werneck, Rafael; Stein, Bernardo; Pazinato, Daniel; de Almeida, Waldir; Penatti, Otávio; Torres, Ricardo; Rocha, Anderson, “ <a href="#">Nearest neighbors distance ratio open-set classifier</a> ”, <i>Springer Machine Learning</i> . 106(3):359–386.
2016	Pazinato, Daniel; Stein, Bernardo; de Almeida, Waldir; Werneck, Rafael; <b>Mendes Júnior, Pedro</b> ; Penatti, Otávio; Torres, Ricardo; Menezes, Fabio; Rocha, Anderson, “ <a href="#">Pixel-level tissue classification for ultrasound images</a> ”, <i>IEEE Journal of Biomedical and Health Informatics</i> . 20(1):256–267.
2015	Penatti, Otávio; Werneck, Rafael; de Almeida, Waldir; Stein, Bernardo; Pazinato, Daniel; <b>Mendes Júnior, Pedro</b> ; Torres, Ricardo; Rocha, Anderson, “ <a href="#">Mid-level image representations for real-time heart view plane classification of echocardiograms</a> ”, <i>Elsevier Computers in Biology and Medicine</i> . 66:66–81.

### PROCEEDINGS

2019	<b>Mendes Júnior, Pedro</b> ; Bondi, Luca; Bestagini, Paolo; Rocha, Anderson; Tubaro, Stefano (2019), “ <a href="#">A PRNU-based method to expose video device compositions in open-set setups</a> ”, In: <i>IEEE Intl. Conference on Image Processing</i> . pp. 1–5. ( <b>To Appear</b> )
2015	Li, Lin; Muñoz, Javier; Almeida, Jurandy; Calumby, Rodrigo; Penatti, Otávio; Dourado, Ícaro; Nogueira, Keiller; <b>Mendes Júnior, Pedro</b> ; Pereira, Luís; Pedronette, Daniel; dos Santos, Jefersson; Gonçalves, Marcos; Torres, Ricardo (2015), “ <a href="#">RECOD @ Placing Task of MediaEval 2015</a> ”, In: <i>MediaEval 2015 Workshop</i> . pp. 1–3.
2014	Li, Lin; Penatti, Otávio; Almeida, Jurandy; Chiachia, Giovanni; Calumby, Rodrigo; <b>Mendes Júnior, Pedro</b> ; Pedronette, Daniel; Torres, Ricardo (2014), “ <a href="#">Multimedia geocoding: The RECOD 2014 approach</a> ”, In: <i>MediaEval 2014 Workshop</i> . pp. 1–2.
2011	<b>Mendes Júnior, Pedro</b> ; Neves, José Maria; Taveres, Andrea; Menotti, David (2011), “ <a href="#">Towards an automatic vehicle access control system: License plate location</a> ”, In: <i>IEEE Intl. Conference on Systems, Man, and Cybernetics</i> . pp. 2916–2921.
2010	<b>Mendes Júnior, Pedro</b> ; Neves, José Maria; Menotti, David (2010), “ <a href="#">Towards an automatic vehicle</a> ”

access control system: License plate location”, In: *WUW Workshop of Undergraduate Work, XXIII Conference on Graphics, Patterns and Image*.

#### PREPRINT

- 2019 **Mendes Júnior, Pedro**; Boulton, Terrance; Wainer, Jacques; Rocha, Anderson (2019), “[Specialized Support Vector Machines for open-set recognition](#)”, *arXiv:1606.03802*.

#### PATENTS

- 2014 **Mendes Júnior, Pedro**; Souza, Roberto; Werneck, Rafael; Stein, Bernardo; Pazinato, Daniel; de Almeida, Waldir; Penatti, Otávio; Torres, Ricardo; Rocha, Anderson, “[Method for Multiclass Classification in Open-set Scenarios and uses thereof](#)”, *United States Patent and Trademark Office (USPTO)*. [US20160092790A1](#), [US10133988B2](#). Filing date: 11/04/2014. Publication date: 03/31/2016. Issue date: 11/20/2018.
- 2014 **Mendes Júnior, Pedro**; Souza, Roberto; Werneck, Rafael; Stein, Bernardo; Pazinato, Daniel; de Almeida, Waldir; Penatti, Otávio; Torres, Ricardo; Rocha, Anderson, “[Método para classificação multiclasse em cenários abertos e usos do mesmo](#)”, *Instituto Nacional da Propriedade Industrial (INPI)*. [BR102014023780A2](#). Filing date: 09/25/2014. Publication date: 05/17/2016.
- 2014 Rocha, Anderson; Torres, Ricardo; Penatti, Otávio; **Mendes Júnior, Pedro**; Pazinato, Daniel; de Almeida, Waldir; Werneck, Rafael; Stein, Bernardo, “[Método para classificação automática de visões do coração a partir de ecocardiogramas](#)”, *Instituto Nacional da Propriedade Industrial (INPI)*. [BR102014011059A2](#). Filing date: 05/07/2014. Publication date: 12/04/2018.