Curriculum Vitae

Name	Allan da Silva Pinto
Birth date	November 24th, 1984, Campinas, São Paulo, Brazil
Nationality	Brazilian
Professional Address	School of Physical Education
	Department of Sports Science
	University of Campinas
	Av. Érico Veríssimo, 701 · Cid. Universitária · Br. Geraldo
	Campinas · São Paulo · Brasil · CEP 13083-851
E-mail	allansp84@gmail.com

1 Education/Training

- *Postdoctoral Researcher in Computer Science*

INSTITUTION	University of Campinas (Unicamp), Campinas, Brazil
TITLE	Unravelling the secret of Brazilian and Dutch soccer by capturing successful elements of game play
SUPERVISOR	Profa. Dra. Fúlvia de Barros Manchado Gobatto
PERIOD	2019/09 – to date
FUNDING	São Paulo Research Foundation (FAPESP), Brazil

- *Postdoctoral Researcher in Computer Science*

INSTITUTION	University of Campinas (Unicamp), Campinas, Brazil
TITLE	Multilingual Text Localization and Recognition in Images and Videos
SUPERVISOR	Prof. Dr. Ricardo da Silva Torres
PERIOD	2018/09 – 2019/09
FUNDING	Samsung R&D Institute Brazil (SRBR), Brazil

- *Ph.D. in Computer Science*

INSTITUTION	University of Campinas (Unicamp), Campinas, Brazil
	with an exchange abroad programme of one year in the *University of Notre Dame, Indiana, USA*, under supervision of *Prof. Dr. Patrick J. Flynn*
TITLE	Analysis of Intrinsic and Extrinsic Properties of Biometric Samples for Presentation Attack Detection
PERIOD	2014/03 – 2018/09
ADVISOR	Prof. Dr. Anderson de Rezende Rocha
CO-ADVISOR	Prof. Dr. Hélio Pedrini
FIELD OF EXPERTISE	Computer vision, Information security, Digital image forensics, Biometrics
FUNDING	Coordination for the Improvement of Higher Education Personnel (CAPES), Brazil
	National Council for Scientific and Technological Development (CNPq), Brazil
	Defense Advanced Research Projects Agency (DARPA)/University of Notre Dame, USA

- *M.Sc. in Computer Science*

INSTITUTION	University of Campinas (Unicamp), Campinas, Brazil
TITLE	A Countermeasure Method for Video-Based Face Spoofing Attacks
PERIOD	2011/03 – 2013/10
ADVISOR	Prof. Dr. Anderson de Rezende Rocha
FIELD OF EXPERTISE	Computer vision, Information security, Digital image forensics, Biometrics
FUNDING	Coordination for the Improvement of Higher Education Personnel (CAPES), Brazil

- *B.Sc. in Computer Science*
  - **Institution** University of São Paulo (USP), São Carlos, Brazil
  - **Title** Métodos de Inteligência de Enxame Aplicados em Visão Computacional
  - **Advisor** Prof. Dr. Odemir Martinez Bruno
  - **Period** 2007/03 – 2011/03
  - **Funding** São Paulo Research Foundation (FAPESP), Brazil

- *Technician in Industrial Computer*
  - **Institution** Salesian University Center of São Paulo (Unisal), Campinas, Brazil
  - **Period** 2001 – 2003

2 Professional Experience

Teaching

- **Institution:** University of Campinas, Campinas, SP, Brazil
  Position: Professor
  Courses Taught: Algorithms and Computer Programming (MC102)
  Period: 2019/08 – 2019/12

- **Institution:** University of Campinas, Campinas, SP, Brazil
  Position: Monitor (Teaching Internship Program)
  Courses Taught: Algorithms and Computer Programming Laboratory (MC102)
  Period: 2015/08 – 2015/12

- **Institution:** Max Planck College, Indaiatuba, SP, Brazil
  Position: Professor
  Courses Taught: Computer Network, Computer Graphics, Compilers, Electrical Installations, Network Management
  Period: 2012/02 – 2014/06

Research

- **Institution:** University of Campinas, SP, Brazil
  Position: Associate Researcher
  Project Title: Data-Driven Approaches for Soccer Match Analysis: an e-Science Perspective
  Funding: São Paulo Research Foundation (FAPESP)
  Period: 2020/02 – Ongoing

- **Institution:** University of Campinas, SP, Brazil
  Position: Postdoctoral Researcher
  Project Title: The secret of playing football: Brazil versus the Netherlands
  Funding: São Paulo Research Foundation (FAPESP)
  Period: 2019/09 – Ongoing

- **Institution:** University of Campinas and Samsung R&D Institute Brazil, SP, Brazil
  Position: Postdoctoral Researcher
  Project Title: Multi-Lingual Text Spotting and Recognition (MLTSR)
  Funding: Samsung R&D Institute Brazil
  Period: 2018/09 – 2019/09

- **Institution:** University of Notre Dame, IN, USA
  Position: Research Assistant (Doctoral Exchange Program)
  Project Title: DARPA Media Forensics (MediFor) Project
  Funding: The Unvirsity of Notre Dame and Defense Advanced Research Projects Agency (DARPA)
  Period: 2016/07 – 2017/07

- **Institution:** University of Campinas, SP, Brazil
  Position: Doctoral-level Postgraduate Research
  Project Title: Spoofing Detection in Biometric Systems
  Funding: Coordination for the Improvement of Higher Education Personnel (CAPES) and The National Council for Scientific and Technological Development (CNPq)
  Period: 2014/02 – 2018/09

- **Institution:** University of Campinas, SP, Brazil
  Position: Master-level Postgraduate Research
  Project Title: A Countermeasure Method for Video-Based Face Spoofing Attacks
  Funding: Coordination for the Improvement of Higher Education Personnel (CAPES)
  Period: 2011/02 – 2013/10

- **Institution:** University of São Paulo, SP, Brazil
  Position: Scientific Initiation
  Project Title: Swarm Intelligence Algorithms for Image Processing and Analysis
  Funding: São Paulo Research Foundation (FAPESP)
  Period: 2010 – 2011

Company

- **Motorola**
  Products: Telecommunication and cell phone manufacturing
  Position: Production operator
  Detailed achievements: Montage and testing of mobile phones and DSL modems
  Period: Three months (Temporary)

- **GE Hydro Inepar**
  Products: Energy and Automation
  Position: Intern in Industrial Computer
  Detailed achievements: Technical drawings with AUTOCAD e EPLAN; Calibration of measurement and control instruments; Testing on electronic boards
  Period: 2003/01 – 2003/12

Refereed Journals and Conferences Reviewer

- Journals

    1. Scientific Reports - Nature (2020)
    2. ACM Digital Threats: Research and Practice (2020)
    3. Elsevier Computers & Security (2020)
    4. IEEE Transactions on Image Processing (2020)
    5. IEEE Journal of Selected Topics in Signal Processing (2020)
    6. IEEE Transactions on Biometrics, Behavior, and Identity Science (2019)
    7. Elsevier Pattern Recognition (2019)
    8. Elsevier Pattern Recognition Letters (2019)
    9. IEEE Transactions on Neural Networks and Learning Systems (2019)
    10. Wiley International Journal of Imaging Systems and Technology (2018)
    11. IEEE Transactions on Pattern Analysis and Machine Intelligence (2018)
    12. IET Biometrics (2017)
    13. IEEE Access (2017)
    14. Journal of Visual Communication and Image Representation (2017)
    15. IEEE Signal Processing Letters (2016)
    16. IEEE Transactions on Information Forensics and Security (2015)

- Conferences

    1. IEEE International Conference on Acoustics, Speech and Signal Processing (2021)
    2. IEEE International Conference on Acoustics, Speech and Signal Processing (2020)
    3. IEEE International Conference on Biometrics: Theory, Applications, and Systems (2020)
    4. Simpósio Brasileiro em Segurança da Informação e de Sistemas Computacionais (2019)
    5. Simpósio Brasileiro em Segurança da Informação e de Sistemas Computacionais (2018)
    6. IEEE International Conference on Biometrics: Theory, Applications, and Systems (2016)

For more details, please see my Publons' profile at
`https://publons.com/researcher/1387770/allan-da-silva-pinto/peer-review/`

Participation in Conference Program Committees

1. XIX Simpósio Brasileiro em Segurança da Informação e de Sistemas Computacionais – SBSeg (2019)

2. XVIII Simpósio Brasileiro em Segurança da Informação e de Sistemas Computacionais – SBSeg (2018)

Participation as an Editorial Board Member and Technical Committees

1. The Information Forensics and Security Technical Committee (IFS-TC) (2021 to date)

2. Forensic Science International: Reports (2019 to date)

Awards

1. 2020 – 1st Place Winner of the Upscaling Euro Data Cube COVID-19 Script Contest Organized by Europe Spacial Agency (ESA) - Algorithm: Measuring Airport Activity from Sentinel-2 Imagery to Support Decision-Making during the Pandemic

2. 2019 – CAPES Best Computer Science Thesis Award, National Award, Brazil

3. 2019 – Best Thesis Award from Institute of Computing at University of Campinas

3 Publications

Refereed Journal Publications

1. D. Menotti, G. Chiachia, A. Pinto, W. Robson Schwartz, H. Pedrini, A. Xavier Falcao, and A. Rocha. Deep representations for iris, face, and fingerprint spoofing detection. *IEEE Transactions on Information Forensics and Security (T-IFS)*, 10(4):864–879, April 2015

2. A. Pinto, W. Robson Schwartz, H. Pedrini, and A. de Rezende Rocha. Using visual rhythms for detecting video-based facial spoof attacks. *IEEE Transactions on Information Forensics and Security (T-IFS)*, 10(5):1025–1038, May 2015

3. A. Pinto, H. Pedrini, W. Robson Schwartz, and A. Rocha. Face spoofing detection through visual codebooks of spectral temporal cubes. *IEEE Transactions on Image Processing (T-IP)*, 24(12):4726–4740, Dec 2015

4. D. Moreira, A. Bharati, J. Brogan, A. Pinto, M. Parowski, K. W. Bowyer, P. J. Flynn, A. Rocha, and W. J. Scheirer. Image provenance analysis at scale. *IEEE Transactions on Image Processing*, 27(12):6109–6123, Dec 2018

5. A. Kuehlkamp, A. Pinto, A. Rocha, K. W. Bowyer, and A. Czajka. Ensemble of multi-view learning classifiers for cross-domain iris presentation attack detection. *IEEE Transactions on Information Forensics and Security*, 14(6):1419–1431, June 2019

6. A. Pinto, S. Goldenstein, A. Ferreira, T. Carvalho, H. Pedrini, and A. Rocha. Leveraging shape, reflectance and albedo from shading for face presentation attack detection. *IEEE Transactions on Information Forensics and Security*, 15:3347–3358, 2020

7. Alexandre G. Almeida, Murilo Merlin, Allan Pinto, Ricardo da S. Torres, and Sergio A. Cunha. Performance-level indicators of male elite handball teams. *International Journal of Performance Analysis in Sport*, 20(1):1–9, 2020

8. D. Dias, A. Pinto, U. Dias, R. Lamparelli, G. Le Maire, and R. d. S. Torres. A multirepresentational fusion of time series for pixelwise classification. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 13(1):4399–4409, 2020

9. J. L. Flores Campana, A. Pinto, M. Alberto Córdova Neira, L. Gustavo Lorgus Decker, A. Santos, J. S. Conceição, and R. da Silva Torres. On the fusion of text detection results: A genetic programming approach. *IEEE Access*, 8(1):81257–81270, 2020

10. Ewerton Silva, Ricardo da S Torres, Allan Pinto, Lin Tzy Li, José Eduardo S Vianna, Rodolfo Azevedo, and Siome Goldenstein. Application-oriented retinal image models for computer vision. *Sensors*, 20(13):3746, 2020

11. M. Córdova, A. Pinto, H. Pedrini, and R. d. S. Torres. Pelee-text++: A tiny neural network for scene text detection. *IEEE Access*, 8(1):223172–223188, 2020

Book Chapters

1. Allan Pinto, Helio Pedrini, Michael Krumdick, Benedict Becker, Adam Czajka, Kevin W. Bowyer, and Anderson Rocha. *Deep Learning in Biometrics*, chapter Counteracting Presentation Attacks in Face Fingerprint and Iris Recognition, page 49. CRC Press, 2018

2. Tiago Carvalho, A. Pinto, E. Silva, F. O. Costa, G. R. Pinheiro, and A.Rocha. *VII Escola Regional de Informática de Minas Gerais*, chapter Crime Scene Investigation (CSI): da Ficção à Realidade, pages 1–23. Anais da VII Escola Regional de InformÃ¡tica de Minas Gerais. 1ed.Juiz de Fora:, 2012

3. Luis A. M. Pereira, Allan Pinto, Fernanda A. Andaló, Alexandre M. Ferreira, Bahram Lavi, Aurea Soriano-Vargas, Marcos V. M. Cirne, and Anderson Rocha. *The Rise of Data-Driven Models in Presentation Attack Detection*, pages 289–311. Springer International Publishing, Cham, 2020

Papers in Proceedings of Refereed Conferences

1. A. da Silva Pinto, H. Pedrini, W. Schwartz, and A. Rocha. Video-based face spoofing detection through visual rhythm analysis. In *25th SIBGRAPI Conference on Graphics, Patterns and Images (SIBGRAPI)*, pages 221–228, Aug 2012

2. I. Chingovska, A. Pinto, H. Pedrini, W.S. Schwartz, A. Rocha, A. Anjos, and S. Marcel *et al.* The 2nd competition on counter measures to 2d face spoofing attacks. In *International Conference on Biometrics (ICB)*, pages 1–6, June 2013

3. A. Pinto, D. Moreira, A. Bharati, J. Brogan, K. Bowyer, P. Flynn, W. Scheirer, and A. Rocha. Provenance filtering for multimedia phylogeny. In *IEEE International Conference on Image Processing (ICIP)*, pages 1502–1506, Sept 2017

4. J. Brogan, P. Bestagini, A. Bharati, A. Pinto, D. Moreira, K. Bowyer, P. Flynn, A. Rocha, and W. Scheirer. Spotting the difference: Context retrieval and analysis for improved forgery detection and localization. In *IEEE International Conference on Image Processing (ICIP)*, pages 4078–4082, Sept 2017

5. A. Bharati, D. Moreira, A. Pinto, J. Brogan, K. Bowyer, P. Flynn, W. Scheirer, and A. Rocha. U-phylogeny: Undirected provenance graph construction in the wild. In *IEEE International Conference on Image Processing (ICIP)*, pages 1517–1521, Sept 2017

6. M. A. Córdova, L. G. L. Decker, J. L. Flores-Campana, A. A. dos Santos, J. S. Conceição, A. Pinto, H. Pedrini, and R. da S. Torres. Pelee-text: A tiny convolutional neural network for multi-oriented scene text detection. In *2019 18th IEEE International Conference On Machine Learning And Applications (ICMLA)*, pages 400–405, Dec 2019

7. Luis Gustavo Lorgus Decker., Allan Pinto., Jose Luis Flores Campana., Manuel Córdova Neira., Andreza A. dos Santos., Jhonatas S. Conceição., Marcus A. Angeloni., Lin Tzy Li., and Ricardo da S. Torres. Mobtext: A compact method for scene text localization. In *Proceedings of the 15th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications - Volume 5: VISAPP,*, pages 343–350. INSTICC, SciTePress, 2020

8. Jhonatas Conceição, Allan Pinto, Luis Decker, Jose Luis Campana, Manuel Neira, Andrezza dos Santos, Helio Pedrini, and Ricardo Torres. Multi-lingual text localization via language-specific convolutional neural networks. In *Anais Estendidos da XXXII Conference on Graphics, Patterns and Images*, pages 215–218, Porto Alegre, RS, Brasil, 2019. SBC

9. A. Pinto, M. A. Córdova, L. G. L. Decker, J. L. Flores-Campana, M. R. Souza, A. A. dos Santos, J. S. Conceição, H. F. Gagliardi, D. C. Luvizon, R. d. S. Torres, and H. Pedrini. Parallax motion effect generation through instance segmentation and depth estimation. In *2020 IEEE International Conference on Image Processing (ICIP)*, pages 1621–1625, October 2020

Abstracts in Proceedings of Refereed Conferences

1. Allan da Silva Pinto and Jorge Luiz e Silva. Chipcflow - uma ferramenta para execução de algoritmos utilizando o modelo a fluxo de dados dinâmico em hardware reconfigurável-circuito matching e instancias. In *Simpósio Internacional de Iniciação Científica da USP (SIICUSP)*, 2009

Thesis and Dissertation

1. Allan Pinto. *Analysis of intrinsic and extrinsic properties of biometric samples for presentation attack detection.* Ph.D. thesis, Institute of Computing, University of Campinas, Brazil, September 2018

2. Allan Pinto. A countermeasure method for video-based face spoofing attacks. Master's thesis, Institute of Computing, University of Campinas, Brazil, October 2013

4 Current Research Grants

1. **PROJECT TITLE:** The secret to play soccer: Brazil versus Netherlands
   PRINCIPAL INVESTIGATOR: Claudio Alexandre Gobatto
   SUPERVISOR: Fúlvia de Barros Manchado Gobatto
   DURATION: 09/01/2019 to 07/31/2021
   FUNDING AGENCY: The São Paulo Research Foundation (FAPESP)
   FUNDING LINE: Post-Doctorate / Continuous Funding Stream

5 List of supervisions, with students holding fellowships

Master Dissertation

1. Jose Luis Flores Campana
   ORIENTATION TYPE: Co-advisor
   INSTITUTION University of Campinas (Unicamp), Campinas, Brazil
   TITLE: A Comparative Study of Text Detection and Recognition Methods
   PERIOD 2017 – 2020
   FUNDING Samsung R&D Institute Brazil (SRBR), Brazil

2. Luis Gustavo Lorgus Decker
   ORIENTATION TYPE: Co-advisor
   INSTITUTION University of Campinas (Unicamp), Campinas, Brazil
   TITLE: Fusion of Contextual Information
   PERIOD 2017 – 2020
   FUNDING Samsung R&D Institute Brazil (SRBR), Brazil

6 Academic Quantitative Indicators

Number of Publications, Patents, Awards, and Google Scholar Citations

- Refereed Journal Publications 11

- Papers in Proceedings of Refereed Conferences 9

- Book Chapters 3

- Abstracts in Proceedings of Refereed Conferences 1

- Awards 3

- Google Scholar Citations (As of March, 2021) 977

7 Other Information

- Google Scholar: `http://tinyurl.com/po8mvvs`

- ORCID: `http://orcid.org/0000-0003-3765-8300`

- Researcher ID: `https://publons.com/researcher/1387770/allan-da-silva-pinto/`

- Personal website: `www.recod.ic.unicamp.br/~allansp` or `https://allansp84.github.io`

- Member of the *IEEE Signal Processing Society (IEEE SPS)*