

# The Unofficial IARIA L<sup>A</sup>T<sub>E</sub>X Class Paper Example (v2024-03)


Christoph P. Neumann 

Department of Electrical Engineering, Media, and Computer Science  
Ostbayerische Technische Hochschule Amberg-Weiden  
Amberg, Germany  
e-mail: c.neumann@oth-aw.de


**Abstract**—Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetur id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum.

*Keywords-template; lorem ipsum.*

## I. INTRODUCTION

The IARIA formatting is based on IEEE style. The unofficial IARIA L<sup>A</sup>T<sub>E</sub>X class is based on IEEEtran class [1]. The IARIA formatting rules [2] are adopted from the IEEE template and formatting specifications [3]. In addition, be aware of the supplementary IARIA editorial rules [4]  that provide a beginner-friendly set of further advices. It is recommended to use a grammar tool, e. g., the LanguageTool [5] browser plugin in combination with Overleaf [6].

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

 IARIA editorial rules: Introduction must end with a paragraph describing the structure of the paper!} The remainder of the paper is organized as follows: In Section II, ...

## II. RELATED WORK | METHODS

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.


## III. RESULTS

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

## IV. DISCUSSION | EVALUATION

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

## V. CONCLUSION AND FUTURE WORK

 IARIA editorial rules: Last section must be “Conclusion and Future Work”!} Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean faucibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum faucibus, egestas vel, odio.

## REFERENCES

- [1] M. Shell, “How to use the IEEEtran L<sup>A</sup>T<sub>E</sub>X class”, 2015, [Online]. Available: [http://mirrors.ctan.org/macros/latex/contrib/IEEEtran/IEEEtran\\_HOWTO.pdf](http://mirrors.ctan.org/macros/latex/contrib/IEEEtran/IEEEtran_HOWTO.pdf).
- [2] IARIA, “Formatting rules”, 2014, [Online]. Available: <http://www.iaria.org/formatting.doc>.
- [3] IEEE, “Conference template and formatting specifications”, 2018, [Online]. Available: <https://www.ieee.org/content/dam/ieee-org/ieee/web/org/conferences/Conference-template-A4.doc>.

- [4] IARIA, “Editorial rules”, 2009, [Online]. Available: <https://www.iaria.org/editorialrules.html>.
- [5] LanguageTooler GmbH, “LangueTool”, [Online]. Available: <https://languagetool.org/overleaf>.
- [6] Digital Science UK Limited, “Overleaf”, [Online]. Available: <https://www.overleaf.com>.
- [7] P. Stangl and C. P. Neumann, “FoodFresh: Multi-Chain Design for an Inter-Institutional Food Supply Chain Network”, in *Proc of the 14th International Conference on Cloud Computing, GRIDs, and Virtualization (Cloud Computing 2023)*, Nice, France, Jun. 2023, pp. 41–46. DOI: 10.48550/arXiv.2310.19461.
- [8] C. P. Neumann and R. Lenz, “Distributed Ad Hoc Cooperation in Healthcare”, in *Post-Proceedings of the Joint Int’l Workshops on Process-oriented Information Systems in Healthcare and Knowledge Representation for Healthcare (ProHealth’12 / KR4HC’12) in conjunction with the 10th Int’l Conf on Business Process Management (BPM’12)*, Part of the Lecture Notes in Computer Science book series (LNAI, volume 7738), Springer, 2013, pp. 113–125. DOI: 10.1007/978-3-642-36438-9\_8.
- [9] C. P. Neumann, “Verteiltes dokumenten-orientiertes prozessmanagement im gesundheitswesen”, in *Ausgezeichnete Informatikdissertationen 2012*, ser. LNI, A. Bernstein et al., Eds., vol. D-13, GI, 2012, pp. 241–250.
- [10] C. P. Neumann and R. Lenz, “The alpha-Flow Approach to Inter-Institutional Process Support in Healthcare”, *International Journal of Knowledge-Based Organizations (IJKBO)*, vol. 2, no. 4, pp. 52–68, 2012. DOI: 10.4018/ijkbo.2012100104.
- [11] C. P. Neumann, S. A. Hady, and R. Lenz, “Hydra Version Control System (Poster)”, in *Proc of the 10th IEEE Int’l Symposium on Parallel and Distributed Processing with Applications (ISPA-12)*, Madrid, Spain, Jul. 2012, pp. 837–838. DOI: 10.1109/ISPA.2012.124.
- [12] C. P. Neumann, A. M. Wahl, and R. Lenz, “Adaptive Version Clocks and the OffSync Protocol (Poster)”, in *Proc of the 10th IEEE Int’l Symposium on Parallel and Distributed Processing with Applications (ISPA-12)*, Madrid, Spain, Jul. 2012, pp. 835–836. DOI: 10.1109/ISPA.2012.123.
- [13] C. P. Neumann, P. K. Schwab, A. M. Wahl, and R. Lenz, “alpha-Adaptive: Evolutionary Workflow Metadata in Distributed Document-Oriented Process Management”, in *Proc of the 4th Int’l Workshop on Process-oriented Information Systems in Healthcare (ProHealth’11) in conjunction with the 9th Int’l Conf on Business Process Management (BPM’11)*, Clermont-Ferrand, FR, Aug. 2011, pp. 225–236. DOI: 10.1007/978-3-642-28115-0\_22.
- [14] C. P. Neumann, T. Fischer, and R. Lenz, “OXDBS – Extension of a native XML Database System with Validation by Consistency Checking of OWL-DL Ontologies”, in *Proc of the 14th International Database Engineering & Applications Symposium (IDEAS’10)*, Montreal, QC, CA, Aug. 2010, pp. 143–148. DOI: 10.1145/1866480.1866502.
- [15] C. P. Neumann and R. Lenz, “The alpha-Flow Use-Case of Breast Cancer Treatment – Modeling Inter-Institutional Healthcare Workflows by Active Documents”, in *Proc of the 19th Int’l Workshops on Enabling Technologies: Infrastructures for Collaborative Enterprises (WETICE 2010)*, Larissa, GR, Jun. 2010, pp. 12–22. DOI: 10.1109/WETICE.2010.8.
- [16] C. P. Neumann and R. Lenz, “alpha-Flow: A Document-based Approach to Inter-Institutional Process Support in Healthcare”, in *Proc of the 3rd Int’l Workshop on Process-oriented Information Systems in Healthcare (ProHealth’09) in conjunction with the 7th Int’l Conf on Business Process Management (BPM’09)*, Ulm, DE, Sep. 2009, pp. 569–580. DOI: 10.1007/978-3-642-12186-9\_55.
- [17] C. P. Neumann and R. Lenz, “A Light-Weight System Extension Supporting Document-based Processes in Healthcare”, in *Proc of the 3rd Int’l Workshop on Process-oriented Information Systems in Healthcare (ProHealth’09) in conjunction with the 7th Int’l Conf on Business Process Management (BPM’09)*, Ulm, DE, Sep. 2009, pp. 557–568. DOI: 10.1007/978-3-642-12186-9\_54.
- [18] C. P. Neumann, S. Hanisch, B. Schiemann, and R. Lenz, “OXDBS – Erweiterung einer nativen XML-Datenbank um die Validierung und Konsistenzprüfung gegen eine OWL-Ontologie”, in *Tagungsband der 54. GMDS-Jahrestagung*, Deutsche Gesellschaft für Medizinische Informatik, Biometrie und Epidemiologie (GMDS), Essen, DE, Sep. 2009. DOI: 10.3205/09GMDS271.
- [19] C. P. Neumann, F. Wagner, and R. Lenz, “XdsRig – Eine Open-Source IHE XDS Testumgebung”, in *Tagungsband der 54. GMDS-Jahrestagung*, Deutsche Gesellschaft für Medizinische Informatik, Biometrie und Epidemiologie (GMDS), Essen, DE, Sep. 2009. DOI: 10.3205/09GMDS276.
- [20] C. P. Neumann, F. Rampp, M. Daum, and R. Lenz, “A Mediated Publish-Subscribe System for Inter-Institutional Process Support in Healthcare”, in *Proc of the 3rd ACM Int’l Conf on Distributed Event-Based Systems (DEBS 2009)*, Nashville, TN, USA, Jul. 2009, 14:1–14:4. DOI: 10.1145/1619258.1619277.
- [21] P. Levi and C. P. Neumann, “Vocabulary Attack to Hijack Large Language Model Applications”, in *Proc of the 15th International Conference on Cloud Computing, GRIDs, and Virtualization (Cloud Computing 2024)*, accepted for publication, Venice, Italy, Apr. 2024. DOI: 10.48550/arXiv.2404.02637.
- [22] A. Pakmehr, A. Aßmuth, C. P. Neumann, and G. Pirkl, “Security Challenges for Cloud or Fog Computing-Based AI Applications”, in *Proc of the 14th International Conference on Cloud Computing, GRIDs, and Virtualization (Cloud Computing 2023)*, Nice, France, Jun. 2023, pp. 21–29. DOI: 10.48550/arXiv.2310.19459.
- [23] A. M. Wahl and C. P. Neumann, “alpha-OffSync: An Offline-Capable Synchronization Approach for Distributed Document-Oriented Process Management in Healthcare (Poster)”, in *Lecture Notes in Informatics (LNI) Seminars 11/Informatiktage 2012*, L. Porada, Ed., Gesellschaft für Informatik e.V. (GI), Mar. 2012, pp. 131–134, ISBN: 978-3-88579-444-8.
- [24] A. Todorova and C. P. Neumann, “alpha-Props: A Rule-Based Approach to ‘Active Properties’ for Document-Oriented Process Support in Inter-Institutional Environments (Poster)”, in *Lecture Notes in Informatics (LNI) Seminars 10/Informatiktage 2011*, L. Porada, Ed., Gesellschaft für Informatik e.V. (GI), Mar. 2011, pp. 131–134, ISBN: 978-3-88579-444-8.
- [25] T. Fischer, M. Daum, F. Irmert, C. P. Neumann, and R. Lenz, “Exploitation of Event-Semantics for Distributed Publish/Subscribe Systems in Massively Multiuser Virtual Environments”, in *Proc of the 14th Int’l Database Engineering & Applications Symposium (IDEAS’10)*, Montreal, QC, CA, Aug. 2010, pp. 90–97. DOI: 10.1145/1866480.1866494.
- [26] H. von Jouanne-Diedrich, J. Blechinger, C. P. Neumann, S. Schwarz, and R. Lenz, “Integration verteilter und heterogener Configuration-Management-Datenbanken”, *Informatik-Spektrum*, vol. 33, A. Bode, Ed., pp. 351–362, 4 2010, ISSN: 0170-6012. DOI: 10.1007/s00287-009-0398-6.
- [27] F. Irmert et al., “Semantics of a Runtime Adaptable Transaction Manager”, in *Proc of the 13th Int’l Database Engineering & Applications Symposium (IDEAS’09)*, Cetraro, IT, Sep. 2009, pp. 88–96. DOI: 10.1145/1620432.1620442.
- [28] F. Irmert, C. P. Neumann, M. Daum, N. Pollner, and K. Meyer-Wegener, “Technische Grundlagen für eine laufzeitadaptierbare Transaktionsverwaltung”, in *Tagungsband der 13. Fachtagung Datenbanksysteme für Business, Technologie und Web (BTW’09)*, Münster, DE: Gesellschaft für Informatik e.V. (GI), Köln, Germany, Mar. 2009, pp. 227–236. DOI: 10.1145/1620432.1620442.

- [29] M. Meyerhöfer and C. Neumann, "TestEJB – a measurement framework for EJBs", in *Proc of the 7th Int'l Symposium on Component-Based Software Engineering (CBSE'04) in conjunction with the 26th Int'l Conf on Software Engineering (ICSE'04)*, ser. Lecture Notes in Computer Science, vol. 3054, Edinburgh, UK: Springer, Berlin, DE, May 2004, pp. 294–301. DOI: 10.1007/978-3-540-24774-6\_26.
- [30] C. P. Neumann, *Distributed Case Handling*. München: Verlag Dr. Hut, 2013, ISBN: 9783843909198.
- [31] C. P. Neumann, "Distributed Document-Oriented Process Management in Healthcare", Ph.D. dissertation, Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, Nov. 2012. DOI: 10.13140/RG.2.2.14719.79521.
- [32] C. P. Neumann, "Design of an Open Framework for Optimizing the Distribution of Hardware and Software Components in Control Networks for Vehicles", Diplomarbeit, Friedrich-Alexander-Universität Erlangen-Nürnberg, Jun. 2005.
- [33] C. P. Neumann, "Conceptual Design and Realization of a 'Component Test Stand' for Measurements on Enterprise JavaBeans", Studienarbeit, Friedrich-Alexander-Universität Erlangen-Nürnberg, Feb. 2004.
- [34] P. Sabau and C. P. Neumann, "Analyse von Methoden zur Sicherung der Vertraulichkeit in Neuronalen Netzen", Ostbayerische Technische Hochschule Amberg-Weiden, Forschungsbericht 2024, Mar. 2024. DOI: 10.13140/RG.2.2.21052.65924.
- [35] P. Brandl *et al.*, "NeunerIn: Eine MEVN-basierte Webanwendung zum kompetitiven Kartenspielen", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2023-11, Jul. 2023. DOI: 10.13140/RG.2.2.33933.31209.
- [36] A. Kestler *et al.*, "Computer Vision Pipeline: Eine React- und Flask-basierte Webanwendung zur No-Code-Bildverarbeitung mit Cloud-Deployment", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2023-08, Jul. 2023. DOI: 10.13140/RG.2.2.23866.98248.
- [37] J. Götz *et al.*, "Nautical Nonsense: Eine Phaser3- und FastAPI-basierte Webanwendung für Schiffe-Versenken mit Cloud-Deployment", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2023-07, Jul. 2023. DOI: 10.13140/RG.2.2.17156.09601.
- [38] L. Feil *et al.*, "Torpedo Tactics: Eine MEVN-basierte Webanwendung für Schiffe-Versenken mit Cloud-Deployment", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2023-06, Jul. 2023. DOI: 10.13140/RG.2.2.22608.69120.
- [39] R. Kietzer *et al.*, "Stockbird: Eine React-basierte Webanwendung mit serverless Cloud-Deployment zur Analyse des Einfluss von Tweets auf Aktienkurs-Schwankungen", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2023-04, Jul. 2023. DOI: 10.13140/RG.2.2.32675.02083.
- [40] C. Rute *et al.*, "FancyChess: Eine Next.js-basierte Cloud-Anwendung zum Schachspielen", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2023-03, Jul. 2023. DOI: 10.13140/RG.2.2.19253.24802.
- [41] A. Chernysheva *et al.*, "SGDb Semantic Video Game Database: Svelte- und Ontotext-basierte Webanwendung mit einer Graphen-Suche für Videospiele", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2023-02, Mar. 2023. DOI: 10.13140/RG.2.2.11272.60160.
- [42] J. Horst *et al.*, "OPCUA-Netzwerk: Angular- und FastAPI-basierte Entwicklung eines OPC-UA Sensor-Netzwerks für den Heimbereich", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2023-01, Mar. 2023. DOI: 10.13140/RG.2.2.22177.79209.
- [43] A. Ziebell *et al.*, "Wo ist mein Geld: Eine MERN-basierte Webanwendung für gemeinsame Ausgaben mit Freunden oder Kollegen", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2022-11, Jul. 2022. DOI: 10.13140/RG.2.2.28888.67847.
- [44] B. Hahn *et al.*, "Twitter-Dash: React- und .NET-basierte Trend- und Sentiment-Analysen", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2022-07, Jul. 2022. DOI: 10.13140/RG.2.2.15466.90564.
- [45] T. Bauer *et al.*, "Reddiment: Eine SvelteKit- und ElasticSearch-basierte Reddit Sentiment-Analyse", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2022-06, Jul. 2022. DOI: 10.13140/RG.2.2.32244.12161.
- [46] F. Bösl *et al.*, "Explosion Guy: Cloud-basiertes Matchmaking für einen graphischen Bombenspaß", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2022-05, Jul. 2022. DOI: 10.13140/RG.2.2.18822.34882.
- [47] D. Smrekar *et al.*, "OTH-Wiki: Ein Angular- und FastAPI-basiertes Wiki für Studierende", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2022-04, Jul. 2022. DOI: 10.13140/RG.2.2.25533.23526.
- [48] J. Halbritter *et al.*, "Graphvio: Eine Graphdatenbank-Webanwendung für integrierte Datensätze von Streaminganbietern", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2022-01, Mar. 2022. DOI: 10.13140/RG.2.2.12111.46244.
- [49] T. Bauer *et al.*, "Covidash: Eine MEAN-Variation-basierte Webanwendung für Inzidenz-Zahlen und Impffortschritt in Deutschland", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2021-06, Jul. 2021. DOI: 10.13140/RG.2.2.33921.84321.
- [50] C. Barbee *et al.*, "FireForceDefense: Graphisches Tower-Defense-Spiel mit Kubernetes-Deployment", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2021-05, Jul. 2021. DOI: 10.13140/RG.2.2.20500.07048.
- [51] E. Cenko *et al.*, "MedPlanner: Eine Angular- und Django-basierte Webanwendung um ärztliche Termine übersichtlich zu verwalten", Ostbayerische Technische Hochschule Amberg-Weiden, CyberLytics-Lab an der Fakultät Elektrotechnik, Medien und Informatik, Tech. Rep. CL-2021-04, Jul. 2021. DOI: 10.13140/RG.2.2.19409.71528.
- [52] C. P. Neumann, F. Rampf, and R. Lenz, "DEUS: Distributed Electronic Patient File Update System", Friedrich-Alexander-Universität Erlangen-Nürnberg, Dept. of Computer Science, Tech. Rep. CS-2012-02, Mar. 2012. DOI: 10.13140/RG.2.2.18075.23848.
- [53] F. Lauterwald *et al.*, "The Erlangen Glaucoma Registry: a Scientific Database for Longitudinal Analysis of Glaucoma", Friedrich-Alexander-Universität Erlangen-Nürnberg, Dept. of Computer Science, Technical Reports CS-2011-02, Dec. 2011. DOI: 10.13140/RG.2.2.31497.01128.