



Name	Artem NECHAUSOV
Position, Department/Faculty	Associate Professor, Department of Geoinformation Technologies and Earth Space Monitoring, Faculty of Rocket and Space Engineering
Academic Degree, Academic Title	Doctoral degree (PhD) in Information Technology, Associate Professor
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Scopus Author ID:	57203142885
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#### **EDUCATION:**

#### Basic education (university, major, year of graduation):

National Aerospace University "Kharkiv Aviation Institute" - Department of geoinformation technologies and space monitoring of the Earth.

[2007-2011] Bachelor's Degree - with honors. Qualification: Junior engineer in geodesy, cartography and land management.

#### Postgraduate/Doctoral studies:

National Aerospace University "Kharkiv Aviation Institute"

[2011-2013] Master's Degree - with honors. Qualification: Geoinformatics engineer.

[2013-2016] Doctoral studies (PhD). [2016] PhD Degree in Information Technology.

#### Additional training, certification programs:

1. National Technical University of Ukraine "Kyiv Polytechnic Institute".

Branch of Vancouver Island University (Faculty of Social Sciences)

Certificate of Advanced Training, World Data Center for Geoinformatics and Sustainable Development

(Specialty 7.060101 - Computer Science), No. IPO 0016. April 24, 2015

Course title: "Introduction to GIS for SDI" – 80 hours of classroom instruction and 120 hours of practical training

2. National Technical University of Ukraine "Kyiv Polytechnic Institute",

Branch of Vancouver Island University (Faculty of Social Sciences)

Certificate of Advanced Training, World Data Center for Geoinformatics and Sustainable Development

(Specialty 7.060101 – Computer Science), No. IPO 0555. December 15, 2015

Course title: "Data Management Systems for SDI" – 80 hours of classroom instruction and 120 hours of practical training

- 3. Secondary Cities Geospatial Training Workshop, Kharkiv, Ukraine September 19–23, 2016
- 4. EOcollege. Echoes in space. Introduction into the principles and applications of radar remote sensing. 2022







#### **WORK EXPERIENCE:**

# Professional Career (Workplace, Years, Position):

National Aerospace University "Kharkiv Aviation Institute"

Department of geoinformation technologies and space monitoring of the Earth:

[2013 - 2015] Department assistant

[2015 - 2020] Senior lecturer of the department

[2020 - Present time] Associate Professor of the department

#### **Teaching Experience:**

[2013 - Present time] National Aerospace University "Kharkiv Aviation Institute"

# **Experience in International or National Projects:**

National Scientific Research Work:

[28.11.2017 – 30.12.19] Development of methods for determining the location of storage of domestic waste and long-term dynamics of their development by remote data (0117U006973)

[12.02.2020 – 30.12.21] Methodology for processing Earth's remote sensing data for environmental monitoring tasks (0120U100530)

[11.04.2022 – 30.12.24] Methodological bases of distributed systems for monitoring environmental objects creating (0122U002298)

#### **RESEARCH ACTIVITIES:**

#### Main Research Areas:

Cartography, cartographic design, geomarketing, web-based cartographic technologies, GIS analysis, remote sensing (Earth observation), environmental and territorial monitoring, digital twins, research on the dispersion of air pollutants in the atmosphere

# Number of Publications (Scopus, WoS, others): [over 45]

#### Monographs, Textbooks:

- 1) Berezina, S. I., Butenko, O. S., Andriev, S. M., Nechausov, A. S. (2012). Principles of Geospatial Portal Construction, Part 1: Textbook. Kharkiv: KhAI.
- 2) Berezina, S. I., Butenko, O. S., Andriev, S. M., Nechausov, A. S., Zamirets, O. O. (2014). Primary Processing of Aerospace Images: Textbook. Kharkiv: National Aerospace University named after N. E. Zhukovsky (KhAI).
- 3) Dovhy, S. O., Krasovskyi, H. Ya., Radchuk, V. V., Trofymchuk, O. M., Nechausov, A. S., et al. (2018). Geomodels in Tasks of Ecological and Economic Land Assessment Monograph / Ed. by S. O. Dovhy. Kyiv: Yuston Publishing LLC.
- 4) Andriev, S. M., Zhilin, V. A., Nechausov, A. S. (2020). Algorithmic Foundations of Geomatics and Systemology: Textbook. Kharkiv: National Aerospace University named after M. E. Zhukovsky "Kharkiv Aviation Institute".
- 5) Andriev, S. M., Zhilin, V. A., Nechausov, A. S. (2021). GIS Analysis- Part 1.: Textbook Kharkiv: National Aerospace University named after M. E. Zhukovsky "Kharkiv Aviation Institute".

#### **Participation in Scientific Conferences:**

1) Nechausov, A. S. (2015). Technology of Remote Sensing Data Storage Development within the Maritime Monitoring Geoportal Structure. In: Proc. of the XI Scientific and Technical Conference of the







Faculty of Rocket and Space Engineering "Modern Problems of Rocket and Space Engineering and Technology", Kharkiv, 2014. – pp. 162–163.

- 2) Nechausov, A. S., Andriev, S. M. (2014). Technology for Creating a Remote Sensing Data Repository within the Structure of a Marine Area Monitoring Geoportal. In: Proc. of the 13th International Scientific and Practical Conference "Modern Information Technologies for Environmental Safety Management, Natural Resource Use, and Emergency Measures", Kyiv, September 29 October 3, 2014. pp. 77–86.
- 3) Nechausov, A. S. (2015). Analysis of Methods for Modeling Local Atmospheric Pollution. In: Proc. of the All-Ukrainian Scientific and Technical Conference "Integrated Computer Technologies in Mechanical Engineering ICTM'2015", Kharkiv, National Aerospace University named after M. E. Zhukovsky (KhAI), November 24–27, 2015. p. 161.
- 4) Nechausov, A. S., Chuprina, O. V. (2017). Application of Cluster Analysis Methods of Statistical Data in Building Cartographic Models. In: Proc. of the 5th International Scientific and Technical Internet Conference "Information Technologies in Education, Science, and Production", Minsk: International Institute of Distance Education, November 18–19, 2017.
- 5) Kharchenko S., Duzhiy I., Duzhiy V., Shumkov. I., Kvasivka. O., Nechausov. A. A Population-Based Study with a Spatial Event Approach of Hepatobiliary Cancers in Ukraine. The liver week 2017. Grand Hyatt Incheon, Korea. 22-24.06.17. pp 181-182
- 6) Sergiy Shmatkov, Nina Kuchuk, Victoriia Merlak, Artem Nechausov. Resources redistribution method of university e-learning on the hyperconvergent platform. 2018 IEEE 9th International Conference on Dependable Systems, Services and Technologies DESSERT'2018. Ukraine, Kyiv, May 24-27, 2018
- 7) Maksym Mariushko, Ruslan Pashchenko, Artem Nechausov. Cloud system arcgis online as a managerial decision-making tool in agricultural production. 2018 IEEE 9th International Conference on Dependable Systems, Services and Technologies DESSERT'2018 Ukraine, Kyiv, May 24-27, 2018
- 8) Sergiy Kharchenko, Loïc Jochault, Artem Nechausov Epidemiologic assessment with a cohort study of current patient access to pancreatic transplantation in France The 31th Meeting of Japanese Society of Hepato-Biliary-Pancreatic Surgery, 2019/6. p. 331
- 9) Danshyna, S. Yu., Nechausov, A. S. (2020). GIS in Social Urban Projects: Analysis of the Medical Facilities Network. In: Proc. of the 15th International Scientific and Practical Conference "Mathematical and Simulation Modeling of Systems MODS 2020", Project Management and Production Organization, No. 3 (59), June 29 July 1, 2020, Chernihiv, Ukraine: Chernihiv National Technological University. pp. 22–28. ISBN 978-617-7571-93-2.
- 10) Horelyk S. I., Nechausov A. S. Forecasting of hydrocarbon deposits based on lineament analysis with use of GIS technologies Multidisciplinary approaches in solving modern problems of fundamental and applied sciences (Natural sciences): Second International Scientific Conference of Young Scientists, 3–6 March 2020, Baku, Azerbaijan. Baku, 2020. P. 30–31.
- 11) Horelyk S. I., Nechausov A. S. Possible river basins flooding zones geomodels development using GIS technologies Paradigmatic view on the concept of world science : Coll. of sci. papers « $\Lambda$ O $\Gamma$ O $\Sigma$ » with Proc. of the Intern. Sci. and Pract. Conf. : Toronto, Canada, 21 Aug. 2020. Vol. 1. P. 77–80.
- 12) Peculiarities of thematic processing of data of Earth monitoring from space / O. Butenko, I. Krasovska, A. Nechausov, M. Mariushko R.Pashchenko //7th International Symposium of Space Optical Instrument and Application, November 24-26, 2022 (Scopus)

#### **TEACHING ACTIVITIES:**







## **Courses Taught:**

Web Cartography, Cartographic Design, Geomarketing, GIS Applications in Environmental Monitoring, Applied Use of GIS (in English), GIS Analysis, GIS Technologies (Course Project), Internet Mapping Services and Geoportals (Elective Course), Modeling of Technogenic Situations Using GIS Technologies (Course Project), Programming of Applied GIS Tasks (Course Project), Digital Image Processing (Course Project), Introductory Internship, Production Internship

# **Author Courses, Academic Programs:**

Web Cartography, Cartographic Design, Geomarketing, Applied Use of GIS (in English)

#### **Methodological Materials, Textbooks:**

Syllabi for the courses: "Geomarketing," "Cartographic Design," "Web Cartography," "Applied Use of GIS (in English)"

Textbooks:

- 1) Andriev, S. M., Zhilin, V. A., Nechausov, A. S., & Lazareva, O. Ye. (2021). GIS Analysis: Textbook for Practical Classes. Kharkiv: National Aerospace University named after M. E. Zhukovsky "Kharkiv Aviation Institute".
- 2) Nechausov, A. S., Andriev, S. M., & Zhilin, V. A. (2022). Animated Geovisualizations and 3D Terrain Models: Textbook for Practical Classes. Kharkiv: National Aerospace University named after M. E. Zhukovsky "Kharkiv Aviation Institute".
- 3) Andriev, S. M., Nechausov, A. S., & Topchiy, A. S. (2024). GIS in Territorial Management: Textbook for Practical Classes. Kharkiv: National Aerospace University named after M. E. Zhukovsky "Kharkiv Aviation Institute".

#### **GRANTS AND PROJECTS:**

# **Participation in International and National Projects:**

[2021 – 2022] Geoportal of the Regional Environmental Monitoring System of Kharkiv Region (Map Developer, designer)

# Grants, Scholarships, Academic Mobility Programs:

[None]

#### PROFESSIONAL ACHIEVEMENTS AND AWARDS:

#### **Honorary Titles:**

[None]

#### **Distinctions, Awards, Prizes:**

[None]

#### **Membership in Professional Associations:**

- 1) Associate membership of the "Geomatics" division of the Public Organization "World Data Center for Geoinformatics and Sustainable Development"
- 2) [since 2020] Participation in the professional association "Regional Center for Earth Remote Sensing 'Slobozhanshchyna'" at the National Aerospace University KhAI

# **INTERNATIONAL ACTIVITIES:**







Internships:

[None]

**Cooperation with Foreign Universities:** 

[None]

**Teaching/Lecturing Abroad:** 

[None]

#### **SELECTED PUBLICATIONS:**

## Key Articles (Scopus, WoS, others):

- 1) Structure of the Environmental Monitoring System Based on a Probabilistic Model of Local Atmospheric Pollution / I. K. Vasilyeva, A. S. Nechausov // Information Processing Systems. 2016. Issue 1. pp. 176–182. Available at: <a href="http://nbuv.gov.ua/UJRN/soi\_2016\_1\_39">http://nbuv.gov.ua/UJRN/soi\_2016\_1\_39</a> (Category B scientific periodical in Ukraine)
- 2) Synthesis of the air pollution level control system on the basis of hyperconvergent infrastructures [Text]. / Nechausov, A., Mamusuĉ, I. and Kuchuk, N. // Modern Information Systems, 2017, 1(2), pp. 21–28. ISSN 2522-9052. DOI: 10.20998/2522-9052.2017.1.04. (Category B scientific periodical in Ukraine)
- 3) Data Mining for Management of Development Project. [Text]. / Danshyna, S. Yu., Nechausov, A. S. // Polish Journal of Science. 2019; 15: P. 34–39. (Category B scientific periodical in Poland)
- 4) Solution of the problem of placing medical facilities in city development projects [Text] / Danshyna, S. Yu. and Nechausov, A. S. // Radio Electronics, Computer Science, Control, 2020, (3), pp. 100–110. DOI: <a href="https://doi.org/10.15588/1607-3274-2020-3-132">https://doi.org/10.15588/1607-3274-2020-3-132</a>. (Wos)
- 5) Information technology for analysis of waste management objects infrastructure [Text] / Danshyna, S., Nechausov, A., Andrieiev, S., Cheranovskiy, V. // Radioelectronic and Computer Systems. 2022. № 2. P. 97 107. DOI: https://doi.org/10.32620/reks.2022.2.08. (Scopus)
- 6) Information technology of transport infrastructure monitoring based on remote sensing data [Text] / S. Danshyna, A. Nechausov, S. Andrieiev // Radio Electronics, Computer Science, Control. − № 4 (63). − 2022. − C. 86 − 97. DOI:https://doi.org/10.15588/1607-3274-2022-4-7. (**WoS**)
- 7) Peculiarities of Thematic Processing of Data of Earth Monitoring from Space [Text] / Butenko, O., Krasovska, I., Horelyk, S., Nechausov, A., Mariushko, M. & Pashchenko, R. // Proceedings of the 7th International Symposium of Space Optical Instruments and Applications (ISSOIA 2022), 2023, pp. 562–585. First Online: 31 August 2023. Conference held: 21–23 October 2022, Beijing, China. (Scopus)
- 8) Determination of geometric characteristics of explosive eruptions on agricultural lands using a remote method // S. Horelyk, A. Nechausov, O. Yankin // Land Management, Cadastre and Land Monitoring: Scientific and Production Journal Kyiv Scientific Research and Design Institute of Land Management, 2022, No. 4, pp. 118–128. (Category B scientific periodical in Ukraine)
- 9) Application of Geoinformation Technologies for Building Cartographic Models of Hazardous Meteorological Phenomena / Control, Navigation, and Communication Systems / S. M. Andriev, S. I. Horelyk, A. S. Nechausov, D. K. Saul-Goze // Collection of Scientific Papers. Poltava: Poltava National Technical University, 2022. Vol. 1 (67). pp. 4–12. DOI: <a href="https://doi.org/10.26906/SUNZ.2022.1.004">https://doi.org/10.26906/SUNZ.2022.1.004</a>. (Category B scientific periodical in Ukraine)
- 10) Information technology of forming the educational network of the territorial community [Text] / S. Danshyna, A. Nechausov // Radio Electronics, Computer Science, Control. № 3 (66). 2023. P. 130 140. DOI: https://doi.org/10.15588/1607-3274-2023-3-13. (WoS)





- 11) Method of information technology for structure analysis of urban network fire-rescue units [Text] / S. Danshyna, A. Nechausov, // Radioelectronic and Computer Systems. 2023. № 4 (108). P. 171 183. DOI: https://doi.org/10.32620/reks.2023.4.12. (Scopus)
- 12) Methodology for organising the process of collecting consolidated evidence for the ruination registry using aerial photography / S. Horelyk, A. Nechausov, M. Levchenko // Land Management, Cadastre and Land Monitoring: Scientific and Production Journal Kyiv Scientific Research and Design Institute of Land Management, 2024, No. 2, pp. 131–145. DOI: <a href="http://dx.doi.org/10.31548/zemleustriy2024.02.011">http://dx.doi.org/10.31548/zemleustriy2024.02.011</a>. (Category B scientific periodical in Ukraine)
- 13) Application of Geoinformation Technologies for Building Cartographic Models of Hazardous Meteorological Phenomena [Text] / S. M. Andriev, S. I. Horelyk, A. S. Nechausov, D. K. Saul-Goze // Control, Navigation, and Communication Systems. Kyiv, 2022. Vol. 1, No. 67. pp. 4–12. DOI: https://doi.org/10.26906/SUNZ.2022.1.004. (Category B scientific periodical in Ukraine)
- 14) Methodology for Analyzing Zones of Pedestrian Accessibility to Shelters Depending on the Type of Ballistic Projectiles Using Modern Geospatial Analysis Tools / A. Nechausov, S. Horelyk, S. Andriev, A. Lakhtina // Control, Navigation, and Communication Systems. Collection of Scientific Papers. Poltava: Poltava National Technical University, 2024. Vol. 2 (76). pp. 11–17. DOI: <a href="https://doi.org/10.26906/SUNZ.2024.2.011">https://doi.org/10.26906/SUNZ.2024.2.011</a>. (Category B scientific periodical in Ukraine)

# **Books, Chapters in Collective Monographs:**

- 1) Dovhy, S. O., Krasovskyi, H. Ya., Radchuk, V. V., Trofymchuk, O. M., Nechausov, A. S., et al. (2018). Geomodels in Tasks of Ecological and Economic Land Assessment Monograph / Ed. by S. O. Dovhy. Kyiv: Yuston Publishing LLC.
- 2) Modern Information Technologies for Environmental Safety Management, Natural Resource Use, and Emergency Measures. Features of Monitoring and Mapping the Actual State of Air Pollution by Industrial Facilities. Collective Monograph based on materials of the 16th International Scientific and Practical Conference (October 3–4, 2017), Kyiv, Pushcha-Vodytsia. pp. 209–211.
- 3) Remote monitoring of deforestation / S. I. Horelyk, A. S. Nechausov, A. V. Fominykh // Collective monograph based on materials of the 20th International Scientific and Practical Conference (Kyiv, October 4–8, 2021) / Ed. by S. O. Dovhy. Kyiv: Yuston Publishing LLC, 2021. pp. 84–86.

#### **Links to Citation Database Profiles:**

https://www.researchgate.net/profile/Artem-Nechausov

https://scholar.google.com/citations?user=0f6ov-cAAAAJ&hl

https://orcid.org/0000-0001-7216-5566

https://www.webofscience.com/wos/author/record/ABB-1319-2021

https://www.scopus.com/authid/detail.uri?authorld=57203142885

#### **ADDITIONAL INFORMATION:**

#### Language Proficiency:

English Language Proficiency Level (B2), Certificate No. 2020-4 (V. N. Karazin Kharkiv National University)

#### IT Skills:

Web and web cartography, GIS and spatial analysis, cartographic design and map creation, environmental monitoring, geomarketing, geospatial data analysis, graphic design using Adobe







Photoshop, Illustrator and other graphic editors, Microsoft Office and Google Workspace, QGIS, ArcGIS, web mapping libraries (Leaflet, OpenLayers, Three.js)

**Social and Community Activities:** [None]

