# Ioannis A. Nikas MSc, PhD

Curriculum Vitae

Ioannis A. Nikas October 8, 2022

PERSONAL Name **loannis** Surname Nikas DETAILS Name of Father Andreas Date of Birth April 9th, 1977 Place of Birth Athens, Greece **Nationality** Greek Military Service **Artillery** Marital Situation Married Voice: 2610962890 CONTACT INFORMATION Floor 2, Office 1 Voice: 2610962894 Laboratory of Tourism Information Systems & **Forecasts Department** of Tourism Management e-mail: nikas[@]upatras.gr M. Alexandrou, Koukouli, Patras, 26334 URL: tourism.upatras.gr/nikas University of Patras tinyurl.com/nikas-location Google Scholar tinyurl.com/scholaren Scopus tinyurl.com/nikas-scopus Research Gate tinyurl.com/rs-gate Home e-mail: john.nikas[@]gmail.com Athinon 111, 26441, Patras skype: nikas.john October 8, Assistant Professor at Department of Tourism Management of University of Patras. 2022 Member of TourISFlab (Tourism Information Systems and Forecasting Laboratory). Research Interests Numerical Computations :: Interval Equations :: Interval methods :: Global Optimization :: Linear Programming:: Data Analysis:: Analysis & Forecasting Tourism Demand:: Sports Analytics :: Smart Tourism :: Geographical Information Systems & Spatial Analysis ACADEMIC EDUCATION Assistant Professor, in the Department of Tourism Management of the University of Patras (August 2019), in "Numerical Computations and Analysis, Forecasting of Tourism Data" (Government Gazette C' 1303/01.08.2019) Ph.D. in "Computational Mathematics and Informatics", Department of Mathematics, University of Patras (June 2011) (Supervisor: Theodoula N. Grapsa) M.Sc. in "Mathematics of Computations and Decision Making", Department of Mathematics, University of Patras (June 2004). B.Sc. (4 years degree) in Mathematics, University of Patras (September 2000).

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SEMINARS -Educational Courses

Diploma in IAMOOC, a MOOC on Interval Analysis with Application to Parameter Estimation, ENSTA-Bretagne engineering faculty, University of Bretagne Occidental (Professor Luc Jaulin) [25.05.2019].

Certified adult trainer [28.07.2017].

Attendance certification of seminar on the operation of protel Hotel software - FRONT OFFICE, HIT, June 10th, Athens, Greece, 2013.

Certification on "Quantum Mechanics and Quantum Computation", a course offered by BerkeleyX, an online learning initiative of The University of California At Berkeley, issued April 30th, 2013.

(Verification at https://verify.edx.org/cert/948e983be8a44404a792818bf6583e91).

Certification on "Introduction to Mathematical Thinking", a course offered by STANFORD UNIVERSITY and offered by Coursera platform, issued May 11th, 2013.

Petit-Hotel Front Office Software, 2m Software, November 30th, Athens, Greece, 2012.

Diploma in The Ticketing Course of Amadeus, Amadeus Certified Agent, July 11th-13th, Athens, Greece, 2011.

Diploma in The Basic Course of Amadeus, Amadeus Certified Agent, July 06th-08th, Athens, Greece, 2011.

Linux using console, 26/10/2009-13/12/2009, offered by Library and Information Center of University of Macedonia.

Educational Course on Train the Trainers, by Human Asset S.A., October 10th-11th, Patras, Greece, 2008.

COMPUTER SKILLS

Languages: Fortran 90/95, C++, Pascal, Matlab, Maple, Java, Visual Basic, HTML/CSS3, PHP, Python.

Applications: LTFX, common Windows database, spreadsheet, and presentation software, SPSS, R, Adobe Dreamweaver CS3, WordPress, QGIS, ArcGIS.

Operating Systems: Unix/Linux-like OS, Dos, Windows.

FINANCED PROJECTS (3) PostDoctoral Researcher in ARCHIMEDES project, subproject 04, entitled "Forecasting Methods on Tourism Demand in the region of West Greece and Exploitation in Providing Innovative and Quality Services", (project id 383592) 17/05/2013 - 30/11/2015.

> Full-time employment in Operational Program for Education and Initial Vocational Training Project: "Reformation of Undergraduate Study Program of University of Patras" 2003 - 2005. Employment in Lab of Sociology and Education of University of Patras as Instructor of SPSS, as well as Supervisor of recording data procedure in SPSS 2003.

# SOFTWARE DEVELOPMENT

A simulation application in Visual Basic (Exam Galileo) of Galileo Training System for examination purposes. (Part of the courses Information Systems in Tourism Firms, Information Systems in Tourism and Hospitality Management Services.)

An application in Visual Basic for assessing the courses Statistics and Quantitative Methods.

A dynamic web page in php for assessing the course Informatics Applications.

A dynamic spreadsheet book in VBA for assessing the course Informatics Applications.

**A windows application** in FORTRAN90 using Microsoft Developer Studio for numerical and graphical solution of nonlinear equations using interval methods (Part of M.Sc. Thesis).

**A simulation application** for the educational assembly compiler Miracle. The application is written in FORTRAN90, Matlab 6.5 & 7.0.

#### WRITING ACTIVITIES

Translation and Scientific Editing

Forecasting: Principle αnd Practice, 3rd edition, Rob J Hyndman and George Athanasopoulos, translated and edited by Assistant Professor Ioannis Nikas [University of Patras] and Associated Professor Athanasios Koutras [University of Peloponnese] - University of Patras Publications, 2022.

**Greek Title** Πρόβλεψη: Αρχές και Πρακτική, **ISBN** 978-960-530-183-5, **Eudoxus ID** 112705742.

EDITING

**Stochastic Processes (Στοχαστικές Διαδικασίες)**, Vassileios Papakonstantinou, University of Patras Publications [Format and ΔΤΕΧ support]

**Continuous Martingales and Brownian Motion**, M. Yor, D. Revuz, translated by Vassileios Papakonstantinou - Leader Books A.E., 2004.[Format and ΔΤΕΧ support]

**Greek Title** Στοιχηματικές Στοχαστικές Διαδικασίες Συνεχούς Χρόνου και Κίνησις Brown, **ISBN** 960-7901-53-3.

## Publications In

JOURNALS (8)

- **J1.** I.A. Nikas, and T.N. Grapsa. *Bounding the zeros of αn interval equation*, Applied Mathematics and Computation, 213(2), pp. 466-478, 2009.
- **J2.** E.N. Malihoutsaki, I.A. Nikas, and T.N. Grapsa. *Improved Newton's method without direct function evaluations*, Journal of Computational and Applied Mathematics, 227(1), pp. 206--212, 2009.
- **J3.** C.D. Nikolakakou, T.N. Grapsa, I.A. Nikas, and G.S. Androulakis, *A sequential αpproach for unconstrained optimization viα α partitioning technique*, International Journal of Computer Mathematics, 92(4), pp. 722-741, 2015.
- **J4.** An. Panagopoulos, Al. Panagopoulos, I. Nikas, and T. Grapsa, A Comparative Study on Tourism Demand in Region Western Greece and its Contiguous Regions, Archives of Economic History, 27(2), pp. 19-35, 2015.

- **J5.** Al. Panagopoulos, S. Malefaki, I.A Nikas, Forecasting The Tourism Demand Using Time-Series -- A Case Study On The Prefectures Of Western Greece, "Tourism Research Institute", Journal of Tourism Research, 11(1), pp. 162-173, 2015.
- **J6.** A. Koutras, A. Panagopoulos, and I. Nikas, *Forecasting Tourism Demand Using Linear* αnd Nonlinear Prediction Models, Academica Touristica, 9(1), pp. 85-98, 2016.
- J7. I. Poulaki, I. Nikas, Measuring tourist behavioral intentions after the first outbreak of COVID19 pandemic crisis. Prima facie evidence from the Greek market, International Journal of Tourism Cities, 7(1), pp. 845-860, 2021. doi:10.1108/IJTC-09-2020-0218
- J8. Μ. Αργυροπούλου, Ε. Κανταρτζή, Κ. Στοφόρος, Α. Παναγόπουλος, Ι. Νίκας και
  Ι. Πουλάκη, Το έργο του Λευκάδιου Χερν στην εκπαίδευση και στον πολιτισμό: Ο Λευκάδιος Χερν ως έμπνευση για εκπαιδευτικές δράσεις. Δημιουργία Ψηφιακής Έκθεσης,
  Culture: Journal in Tourism, Culture, Art and Education, 1(3), pp. 116-132, 2021.

Refereed Conferences & Proceedings (14)

- **C1.** D.G. Sotiropoulos, J.A. Nikas, and T.N. Grapsa. *Improving the Efficiency of α Polynomial System Solver viα α Reordering Technique*, Proceedings of 4th GRACM "Congress on Computational Mechanics", vol. 3, pages 970-977, 2002.
- **C2.** I.A. Nikas, D.G. Sotiropoulos, and T.N. Grapsa. *Extending Interval Newton Method for Nonlinear Parameterized Equations*, Proceedings of ICNAAM 2006, International Conference of Numerical Analysis and Applied Mathematics, pages 512-515, 2006.
- **C3.** E.N. Malihoutsaki, I.A. Nikas, and T.N. Grapsa. *Improved Newton's Method Without Direct Function Evαluαtions*, Proceedings of Numan2007 "Conference in Numerical Analysis", pages 85-88, September 3-7, 2007.
- **C4.** I.A. Nikas, and T.N. Grapsa. On Solving Efficiently Interval Polynomial Equations of Degree n, Proceedings of Numan2008 "Conference in Numerical Analysis: Honoring Richard S. Varga on his 80th birthday", pages 144-147, September 1-5, 2008.
- **C5.** I.A. Nikas, G.S. Androulakis, T.N. Grapsa. *A Hybrid Brαnch-αnd-Bound Algorithm for Bound Constrained Optimization*, Proceedings of Numan2010 "Conference in Numerical Analysis, pages 202--207, Chania, September 15--18, 2010.
- **C6.** I.A. Nikas. Efficient Unconstrained Optimization Multistart Solvers Using α Self-Clustering Technique, in Proceedings of Numan2014 "Conference in Numerical Analysis", pages 204-209, Chania, September 2-5, 2014.
- **C7.** I.A. Nikas, A. Panagopoulos. A heuristic technique for selecting ARIMA models for forecαsting tourism time series, In ICOT2015 "5th International Conference on Tourism, pages 238-251, London, UK, June 24--27, 2015.
- **C8.** G.S. Androulakis, I.A. Nikas, T.N. Grapsa, A. Panagopoulos, *Tourism forecasting using backtracking optimization*, In "5th International Conference on Tourism & Hospitality Management", pages 272-276, Athens, June 05--07, 2015.
- **C9.** E.I. Nikolopoulou, I.A. Nikas, G.S. Androulakis. *Redundant constraints identification in linear programming using statistics on constraints*, In HELORS2017 "6th International

- Symposium and 28th National Conference on Operational Research: OR IN THE DIGITAL ERA ICT CHALLENGES", pages 196-201, Thessaloniki, June 8--10, 2017.
- **C10.** Ι. Νίκας, Ι. Κάτσενος, Γ. Ανδρουλάκης. Χρήση της Θεωρίας ΙRT στην αξιολόγηση της απόδοσης των παικτών ομάδων καλαθοσφαίρισης, Στο 19ο Συνέδριο Διοίκησης Αθλητισμού και Αναψυχής με Διεθνή Συμμετοχή, σελίδες: 75-78, Πάτρα, 16-18 Νοεμβρίου, 2018.
- **C11.** Ι. Νίκας, Γ. Καρολίδης, Γ. Ανδρουλάκης. Άριστοι συνδυασμοί παικτών σε μια ομάδα καλαθοσφαίρισης, Στο 19ο Συνέδριο Διοίκησης Αθλητισμού και Αναψυχής με Διεθνή Συμμετοχή, σελίδες: 79-82, Πάτρα, 16-18 Νοεμβρίου, 2018.
- **C12.** Ε. Κανταρτζή, Μ. Αργυροπούλου, Α. Παναγόπουλος, Γ. Νίκας. Το μουσείο ταξιδεύει: μια κινητή έκθεση με τη βοήθεια της ψηφιακής τεχνολογίας, Στο Ιο Πανελλήνιο Συνέδριο "Το εκπαιδευτικό παιχνίδι στην τυπική και μη τυπική μάθηση", Τόμος Α΄, σελ. 385-295, 14-15 Νοεμβρίου 2020.
- **C13.** I.A. Nikas, T. Grapsa. *Hybridization of bisection method for solving non-differentiable nonlineαr equations*, In 24th Pan-Hellenic Conference on Informatics (PCI 2020). Association for Computing Machinery, New York, NY, USA, 277-280. DOI: 10.1145/3437120.3437324.
- **C14.** Μ. Αργυροπούλου, Α. Παναγόπουλος, Γ. Νίκας, Ι. Πουλάκη. Η έννοια της τουριστικής αειφορίας στην εκπαίδευση: Μια ψηφιακή ευκαιρία, 60 Πανελλήνιο Συνέδριο "Εκπαίδευση και Πολιτισμός στον 21ο αιώνα", Τόμος Α΄, σελ. 40-49, 23-25 Απριλίου 2021.

Paper Presentations IN Refereed Conferences Book of Abstracts (6)

- **P1.** C.D. Nikolakakou, T.N. Grapsa, I.A. Nikas, and G.S. Androulakis. *A Lexicographic Approach on Unconstrained Optimization*, Proceedings of 23rd Conference on Operational Research (Euro XXIII 2009), page 90, July 05--08, 2009.
- **P2.** I.A. Nikas, T.N. Grapsa, and G.S. Androulakis. *Globαl Optimization viα Interval Equations*, Proceedings of 23rd Conference on Operational Research (Euro XXIII 2009), page 249, July 05--08, 2009.
- **P3.** I.A. Nikas, and T.N. Grapsa. *An escape-from-local minimα technique in unconstrained*, In Numan2012 "5th Conference in Numerical Analysis", page 34, Ioannina, September 5--8, 2012.
- **P4.** D. Maginas, I. Poulaki, A. Papaioannou, I. Nikas. *An Evaluation of Customer Relationship Management through Social Media in Aegean Airlines*, 4th International Conference of Development and Economy Virtual 01,02,03/12/2020.
- P5. A. Panagopoulos, I.A. Nikas. Evaluation of Urban Attractions Based on Primary and Secondary Points of Interest: The Case of Museums in the City of Athens, In 9th International Conference in "Tourism, Travel and Hospitality in a Smart and Sustainable World", Syros, September 1-3, 2022.
- P6. I.A. Nikas, A. Koutras, A. Panagopoulos. Dynamic Areas of Interest Inside an Urban Destination Using Visitors' Geolocation, In 9th International Conference in "Tourism, Travel and Hospitality in a Smart and Sustainable World", Syros, September 1-3, 2022.

TECHNICAL
REPORTS (1)

**T1.** D.G. Sotiropoulos, J.A. Nikas, and T.N. Grapsa. *Improving the Efficiency of α Polynomial System Solver viα α Reordering Technique*, Technical Report No. 02-03 (2002). [C1].

#### Reviewer

IN JOURNALS

Tourism Planning & Development

Applied Mathematics and Computation

Applied Mathematical Modelling

Journal of Computational and Applied Mathematics

#### Conferences

WITH PAPER
PRESENTATION (18)

**IACuDiT2022**, 9th International Conference on Tourism, Travel and Hospitality in a Smart and Sustainable World, September 1-3, Syros, Greece, 2022.

**IACuDiT2021**, 8th International Conference on Transcending Borders in Tourism through Innovation and Cultural Heritage, September 1-3, Hydra, Greece, 2021.

**PCI2020**, 24th Pan-Hellenic Conference on Informatics, November 20-22, Athens, Greece, 2020.

**IACuDiT2020**, 7th International Conference on Culture and Tourism in a Smart, Globalized and Sustainable World, September 2-4, Hydra, Greece, 2021.

**ΕλλΕΕΔΑΑ2018**, 19ο Συνέδριο Διοίκησης Αθλητισμού και Αναψυχής με Διεθνή Συμμετοχή, 16-18 Νοεμβρίου, Πάτρα, 2018.

**IACuDiT2018**, 5th International Conference on Exploring Smart Tourism: The cultural and sustainability synergies, June 28-30, Athens, Greece, 2018.

**HELORS2017**, 6th International Sysmposium and 28th National Conference on Operational Research: "OR in the digital era - ICT challenges", June 8-10, Thessaloniki, Greece, 2017.

ICOT2015, 5th International Conference on Tourism, June 24-27, London, UK, 2015.

**ICTHM2015**, 5th International Conference on Tourism & Hospitality Management, June 05-07, Athens, Greece, 2015.

**IACuDiT2015**, 2nd International Conference of Cultural and Digital Tourism, May 21-24, Athens, Greece, 2015.

NumAn2014, 6th Conference in Numerical Analysis, Sep. 2-5, Chania, Greece, 2014.

NumAn2012, 5th Conference in Numerical Analysis, Sep. 5-8, Ioannina, Greece, 2012.

NumAn2010, Conference in Numerical Analysis, Sep. 15-18, Chania, Greece, 2010.

**Euro XXIII 2009**, 23rd Conference on Operational Research, July 05-08, Bonn, Germany, 2009.

NumAn2008, Conference in Numerical Analysis, Sep. 01-05, Kalamata, Greece, 2008.

NumAn2007, Conference in Numerical Analysis, Sep. 03-07, Kalamata, Greece, 2007.

**ICNAAM 2006**, International Conference of Numerical Analysis and Applied Mathematics, Sep. 15-19, Hersonisos, Crete, Greece, 2006.

**4th GRACM**, Congress on Computational Mechanics, June 27-29, Univ. of Patras, Greece, 2002.

#### ATTENDANCE (8)

**IACuDiT2014**, First International Conference of Cultural and Digital Tourism: Cultural Tourism in a Digital Era, May 30 - June 1, Athens, Greece, 2014.

Workshop on Modern Developments in Mathematics: Curricula, research directions and applications, June 13-14, University of Patras, 2005.

**3rd Summer School** in *Stochastic Differential Geometry and Applications in Finance*, July 10th-17th, Thermos Aitoloakarnania, Greece, 2005.

**2nd Summer School** in *Insurance Mathematics through Stochastic Finance*, September 22-27, Dimitsana Arkadias, Greece, 2003.

**14th Summer School-Conference Nonlinear Dynamics: Chaos and Complexity**, July 23 - August 2, Patras, 2001.

**5th Greek-European Conference on Computational Mathematics and Applications**, September 20-22, Athens University Of Economics And Business, Greece, 2001.

**1st International Seminar** on *Mathematics of Computers and Decision Making*, May 25-26, University of Patras, Greece, 2001.

4th Panhellenic Geometry Conference on Research in Geometry and the Education of Geometry at the Dawn of 21st Century, May 28, University of Patras, Greece, 1999.

# ADMINISTRATIVE DUTIES

University of Patras

Мемвек

Reception Committee of the catering service project of the University of Patras

11.11.2021 - today

#### Postgraduated

**PROGRAMS** 

Мемвек

Coordinating Committee in Postgraduate Programm Tourism Business & Destination Management

2022 - 2023

#### DEPARTMENT OF

Tourism Management

COORDINATOR	Committee of Websites Design	2019 - 2022
	Committee of Study Guide Writing	2021 - 2022
	Committee of Timetable and Examination Program	2019 - 2020
Мемвек	Committee of <b>Promotion and Events</b>	2019 - 2022
	Committee of Seminars and Library	2021 - 2022
	Committee of Timetable and Examination Program	2019 - 2021

Experience

Multimedia Technical Support,

Congressional and Cultural Center of University of Patras September, 2005 - December 2008

School of Medicine, Library,

Importation and Processing Library Data

September, 2002 - October, 2006

#### TEACHING

University of Patras, Greece Postgraduate Program: MSc in Leadership

Educational Research Methodology – Quantitative Methods

2021-2022

### Department of Tourism Management

Mathematics in Management & Economics, Introduction to Computer Science, Business Statistics, Information Systems for Tourism Firms, Geographic Information Systems in Tourism, Forecasting Methods in Tourism

2019-now

## Department of Business Administration of Food and Agricultural Enterprises

Mathematics in Management & Economics, Project Management, Διαχείριση Έργων, Decision Making Theory 2018-2019

### Department of Mathematics

Teaching Assistant

2000-2006, 2007-2008

Duties at various times. Have included office hours and leading weekly computer lab exercises in Introduction to Computer Science, Basic Principles in Programming (FORTRAN90), Numerical Analysis, Introduction to Interval Analysis

TEI of Western Greece (FORMER TEI of PATRAS & Messolonghi)

#### Dept of Tourism Management

 $Statistics,\ Information\ Systems\ in\ Tourism,\ DataBases,\ Quantitative\ Methods,$ 

Hospitality Services Administration, Informatics Applications 2010-2019

Dept of Telecommunications Systems and Networks

Object-Oriented Programming with Java 2010-2011

Dept of Aquaculture & Fisheries

Statistics 2010-2011

Dept of Mechanical Engineering

Programming in QBasic and FORTRAN90 2009-2010

Dept of Informatics Applications in Management and Economy

Web Design and Development, Data Structures (Java), DataBases 2008-2009

Dept of Renovation and Re-establishment of Buildings

Mathematics 2008-2009

Dept of Automation

Introduction to informatics 2008-2009

Dept of Administration of Cooperative Organizations

Databases, MS Office 2007-2009

Vergis IVT

Multimedia Applications: Visual Basic, Data communications & Networks, UNIX Operating System, Program Design, Data structures - File Organization, Databases, API applications, Web Applications and Technologies, OpenGL, C++/Java 2008-2015

Business and Finance: Statistics 2008-2013

2ND PUBLIC I.V.T. OF **Multimedia Applications**: Introduction to IT Winter Semester 2009-2010

Patras

I.V.T. AKMI Multimedia Applications: Spreadsheets, Web Technologies 2003-2004

Mentor V.T.C Introduction to ITs (MS Word, MS Access) 2001