CURRICULUM VITAE
Dr. ir. Natalia Stash

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EDUCATION AND QUALIFICATIONS

2014
University Teaching Qualification certificate
Eindhoven University of Technology (TU/e)

2007
PhD degree
Eindhoven University of Technology
Eindhoven, The Netherlands
Faculty of Mathematics and Computer Science
Information Systems section
Web Engineering group
Thesis title: *"Incorporating Cognitive/Learning Styles in a General-Purpose Adaptive Hypermedia System"*

1993 – 1999
Qualification of Engineer with Specialization in Control and Information Technology in Engineering Systems
Saint Petersburg State Electro-Technical University (LETI)
Saint Petersburg, Russia
Faculty of Automation and Information Technology
Engineer diploma title: *"Development of the Distance Learning Server for Studying of Artificial Intelligence"*

1996
Certified tour guide in Saint Petersburg and suburbs for English speaking tourists
Saint Petersburg association of interpreters

WORK EXPERIENCE

Eindhoven University of Technology

Education and Student Affairs

Since Aug 2021
Flex-pool academic advisor at central ESA (Education and Student Affairs)

Mathematics and Computer Science department

Sep 2019 – Aug 2021   Academic advisor for master and HBO-top students in Computer Science
Since Oct 2016   Academic advisor for (pre-)master students in Computer Science
Jan 2013 – Jan 2018   Lecturer
Sep 2012 – Sep 2016   Academic advisor for bachelor students in Web Science
Jul 2001 – Dec 2012   Scientific researcher and programmer

Teaching (courses):

- Adaptive Web-Based Systems (M)
- Web Technology (B)
- Design-Based Learning Hypermedia (B)
- Human-Technology Interaction (B)

Projects:

- AUTHEW EU Lifelong Learning (Autism in Higher Education: Widening Access)
  http://autism&uni.org
  Goal: identifying strategies and creating interactive tools to support autistic students in higher education
  Role: principal investigator from the TU/e side

- EOOE4EU (EIT[1] Open Online Education For Europe)
  Goal: analysing and selecting online platform for professional education
  Role: researcher

- Adaptive Learning
  Goal: creation of an authoring environment and delivery of adaptive learning material for school children
  Role: researcher

- CHIP (Cultural Heritage Information Personalization/Presentation)
  http://chip.win.tue.nl
  Goal: Exploring how personalization, user modelling techniques and semantic web technologies can be used to enhance museum visitors experience
  Role: scientific programmer

- GRAPPLE EU FP7 STREP (Generic Responsive Adaptive Personalized Learning Environment)
  http://grapple.win.tue.nl
  Goal: Delivering to learners a technology-enhanced learning environment that guides them through a life-long learning experience, automatically adapting to personal preferences, prior knowledge, skills and competences, learning goals and the personal or social context in which the learning takes place
  Role: researcher

- AHA! (Adaptive Hypermedia for All)
  http://aha.win.tue.nl
  Goal: To define, study and implement a facility for extending Web-servers with transparent adaptivity functionality
  Role: scientific researcher

- VIBeX (Vehicle Innovation Brabant electric eXchange nodes) in collaboration with Beijer automotive and Sioux companies (NL)
  Goal: developing REST API as a standard for automotive service providers to deliver vehicle data to other parties
  Role: consultant on data format such as RDF, JSON

Collaborations:

- Cross-KIC[2] collaboration within EIT activities
  Goal: Developing Innovation Primer online education programme that involves creating personalized learning paths
  Role: consultant on adaptive learning technologies

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1 EIT – European Institute of Innovation & Technology
2 KIC – Knowledge and Innovation Communities

Institute for High Performance Computing and Databases

1999 – 2001   Researcher
                    Artificial Intelligence Laboratory
                    Saint Petersburg, Russia

                    Projects:
                    • IDLE (Intelligent Distance Learning Environment)
                    • Distance Learning Course on Business Planning

                    Mariinsky theatre

1998 – 2001   Programmer
                    Saint Petersburg, Russia

RESEARCH INTERESTS

include but are not limited to:
(authoring of) adaptive Web-based systems, personalisation, user modelling, human-technology interaction, e-culture applications, (semantic) Web technologies, cognitive/learning styles, visualisation, Web/data science, digital humanities

REVIEWING ACTIVITIES

• New Review of Hypermedia and Multimedia Editorial Office
• IEEE Transactions on Learning Technologies
• MERLOT Journal of Learning and Teaching
• Computers & Education
• Journal of Computer Assisted Learning
• International Journal of Learning Technology
• Journal on Computing and Cultural Heritage

SKILLS

• Java servlets, JSP, JavaScript, jQuery, CSS, HTML(5), JSON, XML, SVG/VML, (Turtle) RDF, SeRQL, SPARQL
• designing AJAX-based applications and Android apps

AWARDS

• **Semantic Web Challenge 2007, 3rd Prize**: CHIP Demonstrator, jointly with TU/e, Rijksmuseum Amsterdam and Telematica Institute, at ISWC'07, Seoul, Korea (2007) *(see the article in Journal of Web Semantics)*
• **James Chen Annual Award for Best UMUAI Article 2008**: Henriette S. M. Cramer, Vanessa Evers, Satyan Ramlal, Maarten van Someren, Lloyd Rutledge, Natalia Stash, Lora Aroyo, Bob J. Wielinga: The effects of transparency on trust in and acceptance of a content-based art recommender, User Modelling, User-Adaptation and Interaction, 18(5): 455-496, 2008

LANGUAGE
Russian (native), English, Dutch

OVERALL INTERESTS
Travelling, learning about different cultures, art, music, sports

BIRTHDATE
February 6, 1976

PUBLICATIONS

PHD THESIS
Stash N., Incorporating Cognitive/Learning Styles in a General-Purpose Adaptive Hypermedia System. Eindhoven University of Technology, The Netherlands, ISBN 978-90-386-1050-4 (2007)

2020

69. IA Pisarev, EE Kotova, NV Stash, AS Pisarev, Assessment of Operator Productivity in Intelligent Systems when Solving Test Problems under Conditions of Uncertainty, XXIII International Conference on Soft Computing and Measurements (SCM), 27-29 May 2020, St. Petersburg, Russia, pages 52-55 (2020)

68. IA Pisarev, EE Kotova, AS Pisarev, NV Stash, Assessment of the Efficiency of Operators Work in Solving Test Problems in the Structure of Intelligent Interfaces, IEEE Conference of Russian Young Researchers in Electrical and Electronic Engineering (EIConRus), 27-30 Jan 2020, St. Petersburg and Moscow, Russia, pages 810-813 (2020)

2019

67. IA Pisarev, EE Kotova, AS Pisarev, NV Stash, Development of scenarios for automatic processing and data mining in a multi-agent environment, IEEE Conference of Russian Young Researchers in Electrical and Electronic Engineering (EIConRus), 28-31 Jan 2019, St. Petersburg and Moscow, Russia, pp. 630-633 (2019)

2018

66. IA Pisarev, EE Kotova, AS Pisarev, NV Stash, Designing Basic Ontologies for Training Specialists in Interdisciplinary Knowledge Domains, XVII Russian Scientific and Practical Conference on Planning and Teaching Engineering Staff for the Industrial and Economic Complex of the Region (PTES), 14-15 Nov 2018, St. Petersburg, Russia, pages 141-144 (2018)

65. IA Pisarev, EE Kotova, AS Pisarev, NV Stash, Structure of knowledge base of methods for processing hydroacoustic signals, IEEE Conference of Russian Young Researchers in Electrical and Electronic Engineering (EIConRus), 29 Jan – 1 Feb 2018, Moscow and St. Petersburg, Russia, pages 1132-1135 (2018)

2016

64. Montes García, A., Stash, N., Fabri, M., De Bra, P., Fletcher, G., Pechenizkiy, M., WiBAF into a CMS: Personalization in Learning Environments Made Easy, In: M. Kravcik, O.C. Santos, J.G. Boticario, M. Bielikova, (Eds.) Proceedings of the 6th International Workshop on Personalization Approaches in Learning Environments (PALE), held in conjunction with the 24th ACM International Conference on User Modeling, Adaptation, and Personalization (UMAP 2016), Halifax, Canada, July 16th, 2016, vol. 1618, pages 57-62. CEUR Workshop Proceedings, ISSN 1613-0073.

63. Montes García, A., Stash, N., Fabri, M., De Bra, P., Fletcher, G., Pechenizkiy, M., Adaptive web-based educational application for autistic students, In the Extended Proceedings of Hypertext 2016, Halifax, Canada, July 11th (2016)

62. De Bra, P., Stash, N., Boereboom, W., Chen, C., den Ouden, J., Kunstman, M., Oostrum, J., Verbakel, E., ALAT: Finally an Easy To Use Adaptation Authoring Tool, In the Proceedings of Hypertext 2016, Halifax, Canada, July 10-13 (2016)

61. De Bra, P., Montes García, A., Stash, N., Novel adaptive features of the Autism&Uni toolkit for students on the autism spectrum, In Proceedings of International Technology, Education and Development Conference (INTED), Valencia, Spain (2016)

2015

60. Montes García, A., Stash, N., De Bra, P., Adaptive Applications to Assist Students with Autism in Succeeding in Higher Education, to be published in the UMAP 2015 Extended Proceedings as a volume of CEUR Workshop Proceedings, Dublin, Ireland (2015)

2014

59. Verbruggen, R., Pereira Roders, A., Stash, N., Leony, D., De Bra, P., Protected Urban Planet: Monitoring the Evolution of Protected Urban Areas Worldwide, Special Session 'Real Spaces and Cyber Spaces: New Challenges in Regional Science' within ERSA 54th congress Regional Development & Globalistation: Best practices, Saint Petersburg, Russia (2014)

2013

58. Stash, N., Veldpaus, L., De Bra, P., Pereira Roders, A., Creating Personalized City Tours Using the CHIP Prototype, In Online Proc. of PATCH workshop of UMAP2013, the 21st Conference on User Modeling, Adaptation and Personalization, Vol-997, Rome, Italy (2013) http://ceur-ws.org/Vol-997/patch2013_paper_9.pdf

57. Stash, N., Veldpaus, L., De Bra, P., Pereira Roders, A., The Protected Urban Planet App "PUP Sight Guide": Amsterdam as Case Study, In Proc. of Conference Culture and Computer Science (KUI2013), Berlin, Germany, pp. 67-80 (2013)

56. De Bra, P., Knutov, E., Smits, D., Stash, N., Ramos, V., GALE: a Generic Open Source Extensible Adaptation Engine, In New Review of Hypermedia and Multimedia, Taylor & Francis (2013)

2011

55. Koren, A., Stash, N., Andreev, A.,A Proposal for Semantic Recommender for Outdoor Audio Tour Guides, Workshop on Personalization in Mobile Applications (PeMA 2011) at the 5th ACM Conference on Recommender Systems (RecSys2011), Chicago, IL, USA (2011)

2010

54. Hage, W.R. van, Stash, N., Wang, Y. and Aroyo, L.M.,Adaptation step-by-step: Challenges for real-time spatial personalization, Workshop on Pervasive User Modeling and Personalization (PUMP 2010) at User Modeling, Adaptation and Personalization (UMAP 2010), Big Island of Hawaii (2010)

53. Wang, Y., Wang, S., Stash, N., Aroyo, L. and Schreiber, G., Enhancing content-based recommendation with the task model of classification, In Proc. of International Conference on Knowledge Engineering and Management by the Masses (EKAW), pp. 431-440 (2010)

52. Hage, W.R. van, Stash, N., Wang, Y. and Aroyo, L.M., Finding your way through the Rijksmuseum with an adaptive mobile museum guide, In Proc. of the 7th Extended Semantic Web Conference (ESWC), pp. 46-59 (2010)

2009

51. Wang, Y., Stash, N., Aroyo, L., Hollink, L. and Schreiber, G., Using Semantic Relations for Content-based Recommender Systems in Cultural Heritage, Workshop on Ontology Patterns (WOP) at International Semantic Web Conference (ISWC) (2009)

50. Wang, Y., Stash, N., Aroyo, L., Hollink, L. and Schreiber, G., Semantic Relations for Content-based Recommendations, In Proc. of International Conference on Knowledge Capture (K-cap), pp. 209-210 (2009)

49. Wang, Y., Aroyo, L., Stash, N., Sambeek, R., Schuurmans Y., Schreiber, G. and Gorgels, P., Cultivating Personalized Museum Tours Online and On-Site, Journal of Interdisciplinary Science Reviews, Vol. 34, No. 2, pp. 141-156 (2009)

48. Roes, I., Stash, N., Wang, Y. and Aroyo, L., A Personalized Walk through the Museum: The CHIP Interactive Tour Guide, In Proc. of ACM CHI-Student Research Competition, pp. 3317-3322 (2009)

2008

47. Wang, Y., Stash, N., Aroyo, L., Gorgels, P., Rutledge, L. and Schreiber, G., Recommendations Based on Semantically-enriched Museum Collections, Journal of Web Semantics: Science, Services and Agents on the World Wide Web, Volume 6, Issue 4, pp. 43 – 50 (2008)

46. Stash, N., Aroyo L., Wang, Y., Rutledge L. and Gorgels P., Semantics-driven Recommendations in Cross-Media Museum Applications, In Proc. of the PATCH Workshop on Hypermedia and Adaptive Web-Based Systems (AH'08), Germany (2008)

45. Wang Y., Cena, F., Carmagnola, F., Cortassa, O., Gena, C., Stash, N. and Aroyo, L., RSS-based Interoperability for User Adaptive Systems, In Proc. of Adaptive Hypermedia and Adaptive Web-Based Systems (AH'08), Germany (2008)

44. Rutledge, L., Stash, N., Wang Y. and Aroyo, L., Accuracy in Rating and Recommending Item Features, In Proc. of Adaptive Hypermedia and Adaptive Web-Based Systems (AH'08), Germany (2008)

43. Carmagnola, F., Cena, F., Cortassa, O., Gena, C., Wang, Y., Stash, N., Aroyo, L., Tag Interoperability in Cultural Web-based Applications, In Proc. of International Conference of Hypertext and Hypermedia, USA, Poster Session (2008)

42. Cramer, H., Evers, V., Ramlal, S., van Someren, M., Rutledge, R., Stash, N., Aroyo, L. and Wielinga, B., The effects of transparency on trust in and acceptance of a content-based art recommender, Journal of User Modeling and User-Adapted Interaction (UMUAI), Volume 18, Number 5 (2008)

41. Wang, Y., Sambeek, Ro, Schuurmans, Y., Aroyo, L., Stash, N., Rutledge, L. and Gorgels, P., Be Your Own Curator with the CHIP Tour Wizard, In Proc. of Museum and the Web (MW'08), Montreal, Canada (2008)

40. Stash, N., De Bra, P., Cristea, A.I., Adaptation to Learning Styles in a General-Purpose System AHA! (Adaptive Hypermedia Architecture) (in russian), In Journal of Educational Technology and Society 11(1), ISSN 1436-4522 (2008)

2007

39. Stash, N., Incorporating cognitive/learning styles in a general-purpose adaptive hypermedia system. ACM SIGWEB Newsletter (Winter), 3-1/2 (2007)

38. Dolog, P., Kravcik, M., Cristea, A.I., Burgos, D., Bra, P.M.E. De, Ceri, S., Devedzic, V., Houben, G.J.P.M., Libbrecht, P., Matera, M., Melis, E., Nejdl, W., Specht, M., Stewart, C., Smits, D., Stash, N. & Tattersall, C., Specification, authoring and prototyping of personalised workplace learning solutions. International Journal of Learning Technology, 3(3), pp. 286-308 (2007)

37. Aroyo, L., Stash, N., Wang, Y., Gorgels, P. and Rutledge, L., CHIP Demonstrator: Semantics-driven Recommendations and Museum Tour Generation, In. Proc. of International Semantic Web Conference, Korea (2007)

36. Wang, Y., Aroyo, L., Stash, N. and Rutledge, L., Interactive User Modeling for Personalized Access to Museum Collections: The Rijksmuseum Case Study, In Proc. of 11th User Modeling Conference, Greece (2007)

35. Aroyo, L., Brussee, R., Gorgels, P., Rutledge, L., Stash, N. and Wang, Y., Personalized Museum Experience: The Rijksmuseum Use Case, In Proc. of Museums and the Web, San Francisco, USA (2007)

34. Rutledge, L., Aroyo, L., Brussee, R., Stash, N., Wang, Y., Cramer, H., Evers, V. and Ramlal, S. Recommendation with Semantics for Cultural Heritage, In Proc. of the PATCH Workshop on 11th User Modeling Conference, Greece (2007)

33. Cramer, H., Evers, V., van Someren, M., Wielinga, B., Besselink, S., Rutledge, L., Stash, N. and Aroyo, L., User Interaction with User-Adaptive Information Filters, In Proc. of Human-Computer Interaction Conference, China (2007)

32. Stash, N., Cristea, A.I., De Bra, P., Adaptation languages as vehicles of explicit intelligence in Adaptive Hypermedia, In International Journal on Continuing Engineering Education and Life-Long Learning, vol. 17, nr 4/5, pp. 319-336, InderScience (2007)

31. De Bra, P., Stash, N., Smits, D., Romero, C., Ventura, S., Authoring and Management Tools for Adaptive Educational Hypermedia Systems: The AHA! Case Study, in: Studies in Computational Intelligence (SCI) nr. 62, pp. 285-308, Springer Verlag (2007)

2006

30. Cristea, A. and Stash N. AWELS: Adaptive Web-Based Education and Learning Styles, In Proc. of ICALT2006 conference, Kerkrade, The Netherlands, pp. 1135-1136 (2006)

29. Stash, N., Cristea, A. and De Bra, P. Adaptation to Learning Styles in E-Learning: Approach Evaluation, In Proc. of E-Learn 2006 Conference, Honolulu, Hawaii (2006)

28. De Bra, P., Smits, D., Stash, N., Creating and Delivering Adaptive Courses with AHA!, In Proc. of the first European Conference on Technology Enhanced Learning, EC-TEL 2006, Springer LNCS 4227, pp. 21-33, Crete (2006)

27. De Bra, P., Smits, D., Stash, N., The Design of AHA!, In Proc. of the ACM Hypertext Conference, Odense, Denmark, pp. 133 and http://aha.win.tue.nl/ahadesign/ (2006)

26. Rutledge, L., Aroyo L. and Stash N., Interactive User Profiling in Semantically Annotated Museum Collections, In Proc. of the 5th International Semantic Web Conference, Athens, GA, USA, Note: Poster (2006)

25. Stash, N., Cristea, A., De Bra, P. Learning Styles Adaptation Language for Adaptive Hypermedia, In Proc. of AH'2006 Conference, Dublin, Ireland, pp.323-327 (2006)

24. Rutledge, L., Aroyo L. and Stash N. Determining user interests about museum collections. WWW 2006, pp. 855-856 (2006)

2005

23. Stash, N., Cristea, A., De Bra, P., Explicit Intelligence in Adaptive Hypermedia: Generic Adaptation Languages for Learning Preferences and Styles, In Proc. of the HT 2005 CIAH Workshop, Salzburg (2005)

22. De Bra, P., Stash, N., Smits, D., Creating Adaptive Web-Based Applications, Tutorial at the 10th International Conference on User Modeling, Edinburgh, Scotland (2005)

2004

21. De Bra, P., Stash, N., Smits, D., Creating Adaptive Textbooks with AHA!, In Proc. of the AACE ELearn'2004 Conference, Washington DC, pp. 2588-2593 (2004)

20. De Bra, P., Stash, N., Smits, D., Creating Adaptive Applications with AHA!, Tutorial for AHA! version 3.0, Tutorial at the AH2004 Conference, Eindhoven, August 23, 2004 Computing Science Report 04-20 (2004)

19. De Bra, P., Stash, N., Multimedia Adaptation Using AHA!, In Proc. of the ED-MEDIA 2004 Conference, Lugano, Switzerland, pp. 563-570 (2004)

18. Stash, N., Cristea, A., De Bra, P., Authoring of Learning Styles in Adaptive Hypermedia: Problems and Solutions, In Proc. of the WWW 2004 Conference, New York, NY, USA, pp. 114-123 (2004)

17. Stash, N., De Bra, P., Incorporating Cognitive Styles in AHA! (The Adaptive Hypermedia Architecture), In Proc. of the IASTED International Conference Web-Based Education, Innsbruck, Austria, pp. 378-383 (2004)

2003

16. De Bra, P., Aerts, A., Berden, B., De Lange, B., Rousseau, B., Santic, T., Smits, D., Stash, N., AHA! The Adaptive Hypermedia Architecture, In Proc. of the ACM Hypertext Conference, Nottingham, UK, pp. 81-84 (2003)

15. Stash, N., De Bra, P., Building Adaptive Presentations with AHA! 2.0, In Proc. of the PEG Conference, Saint Petersburg, Russia (2003)

14. Cristea, A.I., Floes, D., Stash, N., De Bra, P., MOT meets AHA!, In Proc. of the PEG Conference, Saint Petersburg, Russia (2003)

13. De Bra, P., Stash, N., De Lange, B., AHA! Adding Adaptive Behavior to Websites, In Proc. of the NLUUG Conference, pp. n-n+10, Ede, The Netherlands (2003)

2002

12. De Bra, P., Aerts, A., Smits, D., Stash, N., AHA! Version 2.0, More Adaptation Flexibility for Authors, In Proc. of the AACE ELearn'2002 conference, pp. 240-246 (2002)

11. De Bra, P., Aerts, A., Smits, D., Stash, N., AHA! the next generation, In Proc. of the thirteenth ACM conference on Hypertext and hypermedia, pp. 21 – 22 (2002)

10. De Bra, P., Aerts, A., Smits, D., Stash, N., AHA! meets AHAM. Second International Conference on Adaptive Hypermedia and Adaptive Web-Based Systems, Springer LNCS 2347, pp. 381-384 (2002)

9. De Bra, P., Stash, N., AHA! Adaptive Hypermedia for All, In Proc. of the SANE 2002 Conference, Maastricht, pp. 411-412 (2002)

8. De Bra, P., Stash, N., AHA! A General-Purpose Tool for Adaptive Websites. World Wide Web Conference (WWW 2002), Poster Session (2002)

2001

7. Gavrilova T., Stash N., Texier R. Construction of User Model via Psychological Assessment: Work in Progress // Int. Conf. WebNet 2001, Orlando, USA , pp. 396-398 (2001)

6. Gavrilova T., Texier R., Stash N. "VITA: Using PYTHON for Visual Design of Web-Based Tutorials", In Proc. of the Tenth International PEG Conference "Intelligent Computer and Communications Technology - Learning in On-Line Communities", Tampere, Finland, pp.44-50 (2001)

5. Gavrilova T., Texier R., Stash N. Visual Authoring Tool for Web-based Training // Preprints of 8-th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems IFAC HMS, Kassel, Germany, pp. 523-527 (2001)

2000

4. Gavrilova T., Udaltsov S., Stash N. "Development of Distance Education Technology on the Example of Discipline Artificial Intelligence", International Conference on Mathematics/Science Education & Technology, M/SET 2000, San Diego, California, San Diego Marriott-Mission Valley (2000)

1999

3. Gavrilova T., Kotova E., Stash N. "Adaptive Distance Learning Course Guided by Student Model", Advanced Research in Computers and Communications in Education, G.Cumming et.al. (Eds.), IOS Press, 7th International Conference on Computers in Education, ICCE 99, Chiba, Japan, pp. 200-207 (1999)

2. Gavrilova T., Kotova E., Stash N. "Adaptive Teaching of Artificial Intelligence", Interactive Computer-aided Learning, ICL 99, 1999, Villach, Austria (1999)

1. Stash N. "Intelligent Agents for Distance Learning Systems", Interactive Systems, IS 99, Ulyanovsk, Russia, pp. 84-85 (1999)