Curriculum Vitae

PERSONAL INFORMATION

Full name:	**Claus Brabrand**
Date of birth:	May 20, 1973
Nationality:	**Danish**

EDUCATION

Ph.D. (Jan. 24, 2003):	in **Computer Science;** BRICS Int'l Ph.D. School, Aarhus University, Denmark
M.Sc. (Jan. 28, 1999):	in **Computer Science;** Aarhus University, Denmark

PROFESSIONAL TRAINING

Leadership (2024):	Academic Leadership Development Course taught by Geraldine Fitzpatrick & Austen Rainer.
Supervision (2016):	Training Seminar for Experienced PhD Supervisors, organized by Danish University Pedagogic Network (DUN).
Teaching (2005 – 2006):	Formal Teacher Training Programme (Adj.Pæd.), University Pedagogic Network, Aarhus University.

LANGUAGES

Fluent:	**Danish, English**, **French**, & **Portuguese**
Conversation level:	**Spanish** & **Swedish**
Basic conversation:	**German** & **Italian**

PH.D. DISSERTATION

Dissertation: "Domain Specific Languages for Interactive Web Services" (supervisor: Michael I. Schwartzbach)

MANAGEMENT & LEADERSHIP

2020 – (4 years):	**Head of Center** for Computing Education Research (CCER), IT University of Copenhagen
2020 – 2023 (3½ years):	**Member of Project Management Group** for the Teknosofikum project on improving the digital educational competences of higher ed. teachers.
2022 – 2023 (2 years):	**Project Leader** for DIREC WS 12.2 & P31 Projects on the diversity & inclusion wrt recruitment & retention of Computing students.
2017 – 2019 (3 years):	**Head of SQUARE** (Software Quality Research) Group, IT University of Copenhagen, Denmark
2012 – 2013 (1 year):	**Head of Globalization Group**, IT University of Copenhagen, Denmark
2008:	**Developed Educational Strategy** for ITU based on Constructive Alignment & The SOLO Taxonomy. The essence of it is still in effect today (as of 2022).
2006 – 2007 (½ year):	**Head of New Grade Scale Implementation Team**, Faculty of Science, Aarhus University, Denmark

ACADEMIC POSITIONS

2022 – (2 years):	**Full Professor** IT University of Copenhagen, Denmark
2007 – 2022 (15 years):	**Associate Professor** IT University of Copenhagen, Denmark
2004 - 2007 (3½ years):	Assistant Professor BRICS/DAIMI, **Aarhus University**, Denmark
2003 - 2004 (1 year):	Post Doc; then permanent full-time (CR2) researcher INRIA Research Center, **Bordeaux, France**
June-Aug 2001 (3 months):	Summer Co-Op Researcher; IBM T. J. Watson Research Center; Hawthorne, **New York, USA**
Feb-Aug 1999 (6 months):	Research Assistant BRICS/DAIMI, **Aarhus University**, Denmark

AWARDS & RECOGNITION

Sep 30, 2020:	**Danish National Teaching Award.** Recipient of the *first* **Undervisningsprisen 2020**, awarded to two out of approximately 18,000 university teachers in all of Denmark (from Archaeology to Zoology). The award of **500,000 DKK** (€67,000 EUR) was handed over by H. R. H. Crown Princess Mary of Denmark.
Sep 27, 2019:	**ITU Excellence in Teaching Award** (aka, Teacher of the Year Award at ITU): "CB consistently gets stellar student evaluations and holds the ITU record for student satisfaction in a large course: Introductory Programming [..]", Vice Chancellor, ITU 2019.
Oct 23, 2014:	**German IT-Security Award** (runner up) for "SPL^{LIFT}: Statically Analyzing Software Product Lines in Minutes instead of Years". Awarded **€60,000 EUR** (450,000 DKK) with Eric Bodden (lead), Márcio Ribeiro, Társis Tolêdo, Paulo Borba, & Mira Mezini.
July 25, 2013:	My Ph.D. student, Márcio Ribeiro, was awarded **"Best Dissertation in all of Brazil 2012"** in Computer Science at CTD at CSBC 2013.
Sep 30, 2011:	**Best Tool Award** at CBSoft 2011 for the tool: *"A Tool for Improving Maintainability of Preprocessor-based Product Lines"* with Márcio Ribeiro, Társis Tolêdo, & Paulo Borba.
Nov 13, 2006:	Awarded "**The Golden Ratio**" award in 2006, for the 20-minute educational short-film: *"Teaching Teaching & Understanding Understanding"*.

SUPERVISION & MENTORING

Jan. 2023 – (2 years):	**Sebastian M. Nicolajsen**, PhD Student at ITU. Studying CS1 from a student learning perspective.
Jan. 2022 – (3 years):	**Louise Meier Carlsen**, Assistant Professor at ITU. Studies student learning processes and how to transfer didactic methods from Mathematics to Computing.
Jan. 2022 – (3 years):	**Nanna Inie**, Post Doc at ITU, research mentorship. Studies how educational tools can be used to increase the cognitive potential of its users.
Jan. 2022 – June 2022 (½ year):	**Nina Mesing Stausholm Nielsen**, Post Doc at ITU. Studied the appeal of teaching/learning activities in Computing w/ a special focus on diversity & inclusion.
Aug. 2021 – June 2023 (2 years):	**Bjørn Hjorth Westh**, Research Assistant under the DIREC WS12.2 & P31. Works on diversity & inclusion wrt recruitment & retention of Computing students.
Jan. 2021 – Sep 2022 (1½ years):	**Christoph Siedl**, Assistant Professor at ITU, teaching mentorship (professional teacher training) under the Teacher's Development Programme (Adj.Pæd.) at ITU.
July 2020 – June 2022 (2 years):	**Magda Pischetola**, Post Doc at ITU. Studies how to educate academics in Educational Technology with a special focus on how to adopt it in teaching.
2014 – 2017 (3 years):	**Jean Melo**, PhD Student at ITU, advised with Andrzej Wasowski. Studied variability bugs from both the program & programmer's perspective.
2014 – 2017 (4 years):	**Aleksandar Dimovski**, Post Doc at ITU co-supervised with Andrzej Wasowski. Studied how to systematically "lift" various program analyses to cope with variability.
2013 – 2017 (3½ years):	**Iago Abal**, PhD Student at ITU, advised with Andrzej Wasowski. Built bug finder analysis tool that has found several bugs in Linux (that have now been fixed).
2008 – 2013 (4 years):	**Jakob Holdgaard (Grauenkjær) Thomsen**, PhD Student at Aarhus University, advised with Erik Ernst. Developed code which is now running in Google Maps.
2008 – 2012 (4 years):	**Márcio Ribeiro**, PhD Student at Universidade Federal de Pernambuco (Brazil), advised with Paulo Borba. Awarded "Best Dissertation in all of Brazil" in 2012.

(Excluding B.Sc., M.Sc. students, and short-term research assistants.)

KEYNOTES IN COMPUTING EDUCATION

July 6, 2009 (keynote):	**ITiCSE 2009**: International Conference on Innovation and Technology in Computer Science Education; Paris, France
Nov. 16, 2007 (keynote):	**Koli Calling 2007**: International Conference on Computing Education Research; Koli National Park, Finland
June 25, 2007 (invited speaker):	**TeaConc 2007**: Workshop on Teaching Concurrency; Siedlce, Poland

AWARD-WINNING EDUCATIONAL FILM

Short-film (20 minutes):	***"Teaching Teaching & Understanding Understanding"*** *(2006)*
Involvement:	I **wrote**, **directed**, and **produced** the short-film. (The film features epilogue by Prof. **John Biggs**.)
Availability:	Available on **DVD** (non-profit), **YouTube** (for free), and **featured on IMDb** (the Internet Movie Database)
Languages:	Available in **seven languages**: English, French, Spanish, Italian, Portuguese, German, and Danish.
Publisher:	Aarhus University Press, Aarhus University, DK.
Statistics:	Used for educational development **around the world**. **6,000 DVDs** sold at non-profit cost (it sold out three times). **1.1M+ views** (aggregated view counts of all parts, versions, and languages on YouTube).
IMDb:	https://www.imdb.com/title/tt5599360/

TEACHING TEACHERS TO TEACH

Mar 08, 2019 Nov 03, 2017 Oct 22, 2015 Oct 10, 2013	*"How to make sure your **students learn** what you want them to"*. Seminar for **experienced teachers** at Technical University of Denmark (DTU).
Oct 3, 2016 Mar 8, 2017 Oct 9, 2017 Oct 2, 2018	***"How to conduct exams in Denmark"***. Seminar for foreign teachers unfamiliar with the Danish grade and examination system. (Focus: regulations, grading, criterion- vs norm-referenced assessment, the anatomy of oral exams, interacting with the "censor" aka *"external examiner".)*
Aug 2017 Aug 2016 Aug 2015 Aug 2014	*"**Constructive Alignment** & **the SOLO Taxonomy**"*. Seminar for new faculty at the IT University of Copenhagen.
Dec 27, 2022 Aug 3, 2010 Sep 22, 2009	*"**Constructive Alignment** & **the SOLO Taxonomy**"*. Seminar at the Open University of **Israel**, Federal Uni. of Pernambuco, **Brazil** & Reykjavik Uni., **Iceland**
May 19, 2010	*"How to **improve the Quality of Teaching & Learning**"*. Seminar at the Dies Academicus 2010 at the University of Bielefeld, Germany
May 28, 2008 Oct 31, 2008	Organized and taught an all-day institute seminar on teaching & learning for **all faculty** at the IT University of Copenhagen. (Focus: Constructive Alignment and **incentivize & support student learning**, and on *"how to make course descriptions"*.)
Jan 24, 2007 Feb 21, 2007 Nov 27, 2007	*"How to **grade using the new Danish grade scale**"*. Seminar for **all faculty** at the Faculty of Science, Aarhus University & University of Southern Denmark & IT University of Copenhagen.
Dec 19, 2006 Jan 30, 2007	*"**Constructive Alignment**"*. Seminar at the Dept. of Computer Science at Aalborg University & later at Copenhagen Business School Learning Lab, Denmark
Aug 23-25, 2006	Organized **three-day educational seminar** *"Teaching Teaching ...for Computer Scientists"* with Torben K. Jensen for **all faculty** at the Dept. of Computer Science at Aarhus University and presented the "Theory of Didactic Situations".
Nov 25, 2005 Oct 25, 2005	"Introduction to **University Didactics**". Seminar for the FIRST & BRICS Ph.D. Schools at Aarhus University

(Please note that the above list is not exhaustive.)

SPECIALIZED TEACHING EXPERIENCE

IT-Camp*: Apr & Oct 2019 Apr & Oct 2018 Apr & Oct 2017	Course designed to **teach high-school girls** how to program and that it is fun and creative. (Focus is on what you can **do** & **create** with programming rather than on the technology for the sake of technology.)
Boot-IT*: Aug 2019 Aug 2018 Aug 2017 Aug 2016	Course designed to teach basic programming to students who have **never programmed before** starting at ITU. (Most new students already have programming experience; hence intention is to level the field & attract a **wider audience** of students.)
Coding Café*: (designed 2018)	5-week course designed to **teach high-school girls** how to program. (I designed the course and materials and helped recruit and instruct female teaching assistants on how to teach it.)
Coding Classes*: (designed 2018)	Off-campus course designed to **teach high-school students** how to program and foster interest in computing and programming. (I designed the course and materials and helped recruit and instruct teaching assistants on how to teach it.)
Prof. Courses: (24 editions 2018 – 2024) + twice shorter for private companies	*"Introduction to Programming & IT-Thinking"*: 5 full-day course designed to **teach professionals** (esp. financial sector professionals) how to program & how to take advantage of programming in their work.

*) Efforts contributing to **more than doubling #women** (from 10% **to 20+% women**) on the Bachelor of Software Development (at IT Uni of Copenhagen)

CONVENTIONAL TEACHING EXPERIENCE

Fall 2014 –	**Introductory Programming** (1st semester, ITU)
Fall 2014 – 2019:	Practical Concurrent & Parallel Programming, (2 weeks, ITU)
Fall 2015 – 2019:	Automated Software Analysis (5 weeks, ITU)
Spring 2014:	Analysis, Test, and Verification in the Presence of Variability (Ph.D. course, ITU)
Fall 2013:	Global Software Development (Int'l Global Collaboration Course coordinated by ETHZ)
Fall 2011 – 2012:	Introduction to Scripting, Databases, and System Architecture (for Digital Design Students at ITU)
Spr 2011 – 2015:	Interactive Web Services using Java and XML (ITU)
Spr 2011 – 2012:	Global Software Development (ITU & Federal University of Pernambuco, Recife, Brazil)
Fall 2010:	Data-Flow Analysis (3 session mini course at the Federal University of Pernambuco, Recife, Brazil)
Spr 2008 – 2010:	First-Year Projects (ITU)
Fall 2007 – 2009:	Project-work and Communication (ITU)
Spr 2008 – 2011:	Advanced Models & Programs (2*2 weeks, ITU)
Fall 2006 – 2009:	Programming Paradigms (2 weeks, Aalborg Uni.)
Spr 2004 – 2007:	Model-Based Design for Concurrency (Aarhus Uni.)
Spring 2006:	Programming Languages (2 weeks, Aarhus Uni.)
Fall 2005 – 2006:	Semantics (Aarhus University)
Spring 2005:	Macro Seminar (Aarhus University)
Fall 2004:	Concurrency (Professional course, Aarhus University)
Fall 2004:	Web Tech (Professional courses, Aarhus University)
Spring 2002:	Macros & Language Transformation (2wk, Aarhus U)

STAYS ABROAD

2010 & 2017 (6 & 3 months):	Visiting Professor, Universidade Federal de Pernambuco (UFPE), **Recife, Brazil**
2003 – 2004 (1 year):	Post-Doctoral Researcher & CR2 Research Associate INRIA Research Center, **Bordeaux, France**
June-Aug 2001 (3 months):	Summer Co-Op Researcher; IBM T. J. Watson Research Center; Hawthorne, **New York, USA**
1995 – 1996 (1 year):	ERASMUS Exchange Student (Computer Science) Université Louis Pasteur, **Strasbourg, France**

RESEARCH FUNDING

~1.5M DKK (2022 – 2025)	Scholarship for Sebastian M. Nicolajsen who has been accepted onto the Ph.D. programme with start in 2022.
1.4M DKK (2022 – 2023)	*"Initiatives to improve recruitment and retention of IT students"* (aka, DIREC P31) under national DIREC (Digital Research Center Denmark).
2.2M DKK (2021 – 2024)	Mentor role for ATTiKA project: Developing methods and digital tools for learning support for the acquisition of programming skills. Villum PostDoc for Nanna Inie.
0.3M DKK (2021 – 2022)	*"Supporting Diversity via inclusive Teaching/Learning Activities"* (aka, DIREC WS12.2) under national DIREC. (Total budget of WS 12: 6.8M DKK.)
3.0M DKK (2020 – 2023)	Seed Research Center funding for CCER from the IT University of Copenhagen.
0.5M DKK (2020 – 2022)	National Danish Teaching Award 2020 (Undervisningsprisen 2020)
7.5M DKK (2020 – 2023)	The Teknosofikum Project, with Lone Malmborg (lead) under the Danish Agency for Higher Education and Science. Teknosofikum is housed under CCER.
0.3M DKK (2019 – 2021)	Research consultant in the project for "Technology Comprehension in the Education of Teachers" under the Ministry of Children & Education for Technology Comprehension in the Danish Educational System.
5.2M DKK (2017 – 2020)	ROSIN (*"ROS-Industrial Quality Assured Robot Software Components"*) with Andrzej Wasowski (lead) under EU Horizon 2020. (Total budget: 7.5M EUR (= 56M DKK) led by TU Delft.)
~1.5M DKK (2014 – 2017)	Full PhD Scholarship for Jean Melo via CNPq (Brazilian National Council for Scientific and Technological Development).
~0.5M DKK (2014)	German IT-Security Award (runner up) with Eric Bodden (lead), Márcio Ribeiro, Társis Tolêdo, Paulo Borba, & Mira Mezini.
~0.1 DKK (2006)	National Concurrency Teaching Collaboration from It-vest.
~1.0M DKK (2000 – 2003)	Full PhD Scholarship at BRICS Int'l PhD School, Aarhus University.

(In total, 21½M DKK equivalent to about ~3M EUR or ~3M USD.)

ACADEMIC SERVICE

Co-Chair:	LDTA 2011 (with Erik Van Wyk) & LDTA 2010 (with Pierre-Etienne Moreau).
Program Committee Member:	ICER 2024, SEET 2023, ICER 2023, ICER 2022, ICSE-SEET 2021, SPLC 2018, SBCARS 2017, SEAA 2017, VAMOS 2017, SPLC 2016, MODULARITY VISIONS 2016, SLE 2012, LDTA 2008, & LDTA 2007.
Jury Member:	DGS 2008 & DGS 2009 (Edu Media Awards)

(Along with an extensive amount of journal reviews over the years.)

DISSEMINATION

Mar, 2022:	🇫🇷 French, 🇪🇸 Spanish, and 🇧🇷 Portuguese language versions of 3' popular research promo film.
Nov 30, 2021:	"Increasing Diversity in IT Education": Invited talk at the Digital Tech Summit 2021 w/ ~5000 participants.
Nov, 2021:	"Three +1 Perspectives on Computational Thinking": video recorded presentation for Koli Calling 2021.
Oct 19, 2021:	"Women prefer People": Samdata\HK Magasinet (Labor Union Magazine), Oct issue, p. 19.
Oct 12, 2021:	"How to Diminish the Gender Gap in Tech Education": Presentation and panel debate at the "Ada Lovelace Day: Combatting the Gender Gap in Tech", org. by Danish Industry & Copenhagen U.
Sep 23, 2021:	"How can we encourage more women to study computer science?": First DIREC Talk in Denmark! (All subsequent talks given by only Full Professors.)
Sep 6, 2021:	"Researchers: New Focus can make IT appeal more to women": Gymnasieskolen, 2021(5), p. 16 (Magazine for high-school teachers).
Sep 3, 2021:	"Better Gender Balance in IT": Popular article in PROSA Magazine for IT Professionals, PROSA 2021(9), p.14 – 18. English translation: https://ccer.itu.dk/pvst_prosa_article
Aug 31, 2021:	"Simple change makes IT more appealing to women": Popular article in Videnskab.dk (popular online science magazine). Also published in Finance.dk on (Financial magazine) & Jyllandsposten (news paper).
Aug 23, 2021:	"Computing Educational Activities Involving People Rather Than Things Appeal More to Women": Our paper was the topic of a podcast: CSK#8 by Jared O'Leary.
Aug 26, 2021:	"University: There are simple solutions to the problem with few women in IT education": Version2.dk (Popular online engineering magazine).
Aug 19, 2021:	Interview in Radio LOUD, Daily news.
Aug 17, 2021:	"Recruiting from only half of the talent pool is not enough": Version2 (Popular online engineering magazine).
Aug, 2021:	🇺🇸 "Increasing the appeal of Computing Education to Women": 3 minute popular research promo film along with two 10' conference talks: https://ccer.itu.dk/icer_2021
Jan 4, 2021:	"IT Professionals Hacking the Crystal Ball": Interviewed as an IT expert about the challenges for IT in 2021 for Popular article in PROSA Magazine for IT Professionals, PROSA 2021(1), p. 23.
Nov 5, 2020:	Online Inauguration of the Center for Computing Education Research (CCER). Talk along with Amy J. Ko, Michael E. Caspersen, and Simon Peyton Jones.
Sep 30, 2020:	"Handing out the Teaching Award 2020": Kongehuset (The homepage of the Danish Royal Family) about CB Receiving the Danish National Teaching Award from H. R. H. Crown Princess Mary of Denmark.
Dec 8, 2020:	"We need to be more than a nation of PC Users with a computer driver's license": Popular debate article with Jari Kickbusch in Jyllandsposten (news paper).
May 4, 2020:	"How to make programming and Computational Thinking relevant for students of many different subjects?". Teknosofikum Webinar at Danish IT.
Nov 5, 2014:	"Danish IT Researcher wins IT Security Award for Groundbreaking Software Analysis": popular article in Version2 (Popular online engineering magazine).
Oct, 2014:	VBDb (Variability Bugs Database). Online archive of 100 variability bugs along with simplified versions, error traces, and bug fixes. VBDb is used and cited by many papers. http://vbdb.itu.dk
Mar 23, 2011:	"Ambiguity: On People and Computers": 24 minute TV programme on DR2 about *Ambiguity* in human languages and programming languages.
Oct 8, 2010:	"Teaching & Learning Seminars at ITU": 84 minutes video recorded seminar about Constructive Alignment & SOLO Taxonomy. ITU, Copenhagen.
Oct 26, 2006:	"Teaching Teaching & Understanding Understanding" 19-minute award-winning educational short-film on Constructive Alignment & SOLO Taxonomy. DVD. Available in seven languages. https://ttuu.itu.dk
July 13, 2001:	"Flexible, Safe, and Efficient Dynamic Generation of HTML": Video recorded talk at T. J. Watson IBM Research. 62'. (Hawthorne, NY, USA.)
Mar 20, 2000:	"<bigwig>: a Programming Language for Developing Interactive Web Services": Video recorded talk at Microsoft Research. 72'. (Redmond, WA, USA.)

(Excluding several articles about the CCER inauguration, Danish National Teaching Award 2020, & numerous invited scientific talks.)

PUBLICATION LIST (■ Computing Education Research // ■ Software Variability & Product Lines // ■ Programming Languages)

■	67. C39	Sebastian Mateos Nicolajsen, Michael Caspersen, **Claus Brabrand**: Circle of Life: Microworld Project at the end of CS1. SIGCSE-TS 2025. (2025).
■	66. C38	Jakob Staugaard, Jens Bennedsen, Christoph Seidl, Sebastian Nicolajsen, Mathias Fink, **Claus Brabrand**: Visualizing the Conceptual Framework of Object Orientation for Novice Programmers. FIE 2024. (2024).
■	65. C37	Ingrid Maria Christensen, Melissa Høegh Marcher, Nanna Inie, **Claus Brabrand**: Invisible Women in IT: Examining Gender Representation in K-12 ICT Teaching Materials. ICER 2024. (2024).
■	64. C36	**Claus Brabrand**, Nanna Inie, Paolo Tell: Programming under the Influence: On the Effect of Heat, Noise, and Alcohol on Programmers. Journal of Systems & Software 2024. (2024).
■	63. C35	Nynne Grauslund Kristiansen, Sebastian Mateos Nicolajsen, **Claus Brabrand**: Feedback on Student Programming Exercises: Teaching Assistants vs Automated Assessment Tool. Koli Calling 2023. (2023).
■	62. C34	Bjørn Hjorth Westh, Nanna Inie, Louise Barkhuus, **Claus Brabrand**: Gender Differences in the Group Dynamics of Smaller CS1 Project Groups. FIE 2023. (2023).
■	61. C33	Pawel Grabarczyk, Sebastian Mateos Nicolajsen, **Claus Brabrand**: On the Effect of Onboarding Computing Students without Programming-Confidence or -Experience. Proc. 21st Koli Calling Int'l Conf on Computing Education Research, Koli Calling 2022. (2022).
■	60. C32	Björn Thór Jónsson, Magda Pischetola, Nanna Inie, Mats Daniels, **Claus Brabrand**: Student Perspectives on On-site versus Online Teaching throughout the Covid-19 Pandemic. Proc. 52nd Frontiers in Education Conference, FIE 2022. (2022).
■	59. C31	Pawel Grabarczyk, Alma Freiesleben, Amanda Bastrup, **Claus Brabrand**: Computing Educational Programmes with more Women are more about PEOPLE & less about THINGS. Proc. 27th ACM Conf. on Inno. & Tech. in Computer Science Education, ITiCSE. (2022).
■	58. C30	Melissa Høegh Marcher, Ingrid Maria Christensen, Pawel Grabarczyk, Therese Graversen, **Claus Brabrand**: Computing Educational Activities Involving People Rather Than Things Appeal More to Women (CS1 Appeal Perspective). ACM Conference on International Computing Education Research, ICER 2021: 145-156. (2021).
■	57. C29	Ingrid Maria Christensen, Melissa Høegh Marcher, Pawel Grabarczyk, Therese Graversen, **Claus Brabrand**: Computing Educational Activities Involving People Rather Than Things Appeal More to Women (Recruitment Perspective). ACM Conference on International Computing Education Research, ICER 2021: 127-144. (2021).
■	56. J22	Nanna Inie, Louise Barkhuus, **Claus Brabrand**: How Interaction Influences Academic Reading: A Comparison of Paper and Laptop. Social Sciences & Humanities Open. 21pp. (2021).
■	55. C28	Sebastian Mateos Nicolajsen, Magda Pischetola, Pawel Grabarczyk, **Claus Brabrand**: Three +1 Perspectives on Computational Thinking. Proc. 21st Koli Calling International Conference on Computing Education Research, Koli Calling 2021: 2:1-2:11. (2021).
■	54. J21	Aleksandar S. Dimovski, **Claus Brabrand**, Andrzej Wasowski: Finding Suitable Variability Abstractions for Lifted Analysis. Formal Aspects of Computing 31(2): 231-259 (2019).
■	53. J20	Aleksandar S. Dimovski, **Claus Brabrand**, Andrzej Wasowski: Variability Abstractions for Lifted Analyses. Science of Computer Programming, SCP. 159: 1-27 (2018).
■■	52. J19	Iago Abal, Jean Melo, Stefan Stanciulescu, **Claus Brabrand**, Márcio Ribeiro, Andrzej Wasowski: Variability Bugs in Highly Configurable Systems: A Qualitative Analysis. ACM Transactions on Software Engineering and Methodology, TOSEM. 26(3): 10:1-10:34 (2018).
■	51. J18	Alexandru Florin Iosif-Lazar, Jean Melo, Aleksandar S. Dimovski, **Claus Brabrand**, Andrzej Wasowski: Effective Analysis of C Programs by Rewriting Variability. The Art, Science, and Engineering of Programming. 1(1): 1 (2017).
■	50. J17	Aleksandar S. Dimovski, Ahmad Salim Al-Sibahi, **Claus Brabrand**, Andrzej Wasowski: Efficient Family-Based Model Checking via Variability Abstractions. International Journal on Software Tools for Technology Transfer. 19(5): 585-603 (2017).
■■	49. C27	Jean Melo, Fabricio Batista Narcizo, Dan Witzner Hansen, **Claus Brabrand**, Andrzej Wasowski: Variability through the Eyes of the Programmer. Proc. of the 25th International Conference on Program Comprehension, ICPC 2017: 34-44. (2017).
■■	48. C26	Iago Abal, **Claus Brabrand**, Andrzej Wasowski: Effective Bug Finding in C Programs with Shape and Effect Abstractions. Proc. of the 18th International Conference on Verification, Model Checking, and Abstract Interpretation, VMCAI 2017: 34-54. (2017).
■	47. C25	Aleksandar S. Dimovski, **Claus Brabrand**, Andrzej Wasowski: Finding Suitable Variability Abstractions for Family-Based Analysis. Proc. of the 21st International Symposium on Formal Methods, FM 2016: 217-234. (2016).
■■	46. C24	Jean Melo, **Claus Brabrand**, Andrzej Wasowski: How does the Degree of Variability affect Bug Finding? Proc. of the 38th International Conference on Software Engineering, ICSE 2016: 679-690. (2016).
■■	45. C23	Jean Melo, Elvis Flesborg, **Claus Brabrand**, Andrzej Wasowski: A Quantitative Analysis of Variability Warnings in Linux. Proc. 10th International Workshop on Variability Modelling of Software-intensive Systems, VaMoS 2016: 3-8. (2016).
■■	44. J16	Jan Midtgaard, Aleksandar S. Dimovski, **Claus Brabrand**, Andrzej Wasowski: Systematic Derivation of Correct Variability-Aware Program Analyses. Science of Computer Programming, SCP 105: 145-170 (2015).
■	43.	Aleksandar S. Dimovski, **Claus Brabrand**, Andrzej Wasowski: Variability Abstractions: Trading Precision for Speed in Family-Based

	C22	Analyses. 29th European Conference on Object-Oriented Programming, ECOOP 2015: 247-270. (2015).
■	42. C21	Aleksandar S. Dimovski, Ahmad Salim Al-Sibahi, **Claus Brabrand**, Andrzej Wasowski: Family-Based Model Checking Without a Family-Based Model Checker. 22nd International Symposium on Model Checking Software, SPIN 2015: 282-299. (2015).
■	41. C20	Aleksandar S. Dimovski, Ahmad Salim Al-Sibahi, **Claus Brabrand**, Andrzej Wasowski: Family-Based Model Checking using Off-the-Shelf Model Checkers: Proc. 19th International Conference on Software Product Line, Model Checking Software, SPLC: 397. (2015).
■	40. B04	Márcio Ribeiro, Paulo Borba, **Claus Brabrand**: Emergent Interfaces for Feature Modularization. Springer Briefs in Computer Science, Springer 2014, ISBN 978-3-319-11492-7, pp. 1-84. (2014).
■	39. B03	**Claus Brabrand**, Eric Van Wyk: Preface to the Special Section on Language Descriptions, Tools, and Applications (LDTA 2011). Science of Computer Programming, SCP. 87: 1 (2014).
■■	38. C19	Iago Abal, **Claus Brabrand**, Andrzej Wasowski: 42 Variability Bugs in the Linux Kernel: A Qualitative Study. Proc. 29th IEEE/ACM International Conference on Automated Software Engineering (ASE), pp. 421-432. (2014.)
■■	37. C18	Jan Midtgaard, **Claus Brabrand**, Andrzej Wasowski: Systematic Derivation of Static Analyses for Software Product Lines. Proc. 13th International Conference on MODULARITY 2014, p. 181-192. (2014).
■■	36. J15	Eric Bodden, Tarsis Toledo, Marcio Ribeiro, **Claus Brabrand**, Paulo Borba, Mira Mezini: SPL[LIFT]: Statically Analyzing Software Product Lines in Minutes Instead of Years, Software Engineering 2014: 81-82. (2014).
■■	35. J14	Jacob Andersen, **Claus Brabrand**, David R. Christensen: Banana Algebra: Compositional Syntactic Language Extension. Science of Computer Programming, Vol. 78(10), p. 1845-1870, Elsevier. (2013).
■■	34. C17	Eric Bodden, Tarsis Toledo, Marcio Ribeiro, **Claus Brabrand**, Paulo Borba, Mira Mezini: SPL[LIFT]: Statically Analyzing Software Product Lines in Minutes Instead of Years. 34th ACM Conf on Programming Language Design & Implementation (PLDI), p. 355-364. (2013).
■■	33. J13	**Claus Brabrand**, Márcio Ribeiro, Társis Tolêdo, Johnny Winter, Paulo Borba: Intraprocedural Dataflow Analysis for Software Product Lines. Transactions on Aspect-Oriented Software Development, TAOSD. Vol. 10, p. 73-108, Springer. (2013).
■	32. C16	Jakob G. Thomsen, Erik Ernst, **Claus Brabrand**, Michael Schwartzbach: WebSelF: A Web Scraping Framework, Proc. International Conference on Web Engineering 2012 (ICWE 2012), p. 347-361. (2012).
■	31. C15	Márcio Ribeiro, Társis Tolêdo, Johnni Winther, **Claus Brabrand**, Paulo Borba: Emergo: A Tool for Improving Maintainability of Preprocessor-based Product Lines. Proc. AOSD 2012 Demos. (2012).
■■	30. C14	**Claus Brabrand**, Márcio Ribeiro, Társis Tolêdo, Paulo Borba: Intraprocedural Dataflow Analysis for Software Product Lines. Proc. MODULARITY: AOSD 2012, p. 13-24. (2012).
■	29. C13	Márcio Ribeiro, Felipe Queiroz, Paulo Borba, Társis Tolêdo, **Claus Brabrand**, Sérgio Soares: On the Impact of Feature Dependencies when Maintaining Preprocessor-based Software Product Lines. Proc. Generative Prog. & Component Eng. (GPCE), p. 23-32. (2011).
■	28. C12	Márcio Ribeiro, Társis Tolêdo, Paulo Borba, **Claus Brabrand**: A Tool for Improving Maintainability of Preprocessor-based Product Lines. Proc. 2nd Brazilian Conference on Software: Theory and Practice (CBSoft). (2011).
■	27. B02	**Claus Brabrand**, Eric Van Wyk: Proceedings of the of the 11th Workshop on Language Descriptions, Tools and Applications, LDTA 2011. Proceeding. ACM 2011, ISBN 978-1-4503-0665-2. (2011).
■■	26. J12	Jacob Andersen, **Claus Brabrand**: Syntactic Language Extension via an Algebra of Languages and Transformations. Electronic Notes in Theoretical Computer Science 253(7): 19-35 (2010).
■	25. J11	**Claus Brabrand**, Robert Giegerich, Anders Møller: Analyzing Ambiguity of Context-Free Grammars. Science of Computer Programming (SCP), Vol. 75(3), p. 176-191, Elsevier. (2010).
■	24. C11	**Claus Brabrand**, Jakob G. Thomsen: Typed and Unambiguous Pattern Matching on Strings using Regular Expressions. In Proc. 12th International ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP), p. 243-254. (2010).
■	23. B01	**Claus Brabrand**, Pierre-Etienne Moreau: Proceedings of the of the 10th Workshop on Language Descriptions, Tools and Applications, LDTA 2010", Paphos, Cyprus, March 28-29, 2010. ACM 2010, ISBN 978-1-4503-0063-6. (2010).
■	22. C10	**Claus Brabrand**, Bettina Dahl: Analyzing CS Competencies using the SOLO Taxonomy. Keynote for ITiCSE 2009. Proceedings of the 2009 ACM SIGCSE Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE), Paris, France. (2009).
■	21. C09	Jacob Andersen, **Claus Brabrand**: Syntactic Language Extension via an Algebra of Languages and Transformations. Proc. 9th Workshop on Language Descriptions, Tools, and Applications (LDTA), p. 67-85. (2009).
■	20. J10	**Claus Brabrand**, Bettina Dahl: Using the SOLO Taxonomy to Analyze Competence Progression of University Science Curricula, Higher Education, Vol. 58(4), p. 531-549, Springer. (2009).
■	19. J09	**Claus Brabrand**: Constructive Alignment for Teaching Model-Based Design for Concurrency. Transactions on Petri-Nets and Other Models of Concurrency (ToPNoC), Vol. 1(1), p. 1-18, Springer-Verlag. (2008).
■■	18. J08	**Claus Brabrand**, Anders Møller, Michael Schwartzbach: Dual Syntax for XML Languages. Information Systems, Vol. 33(4), p. 385-406, Elsevier. (2008).
■	17.	**Claus Brabrand**, Bettina Dahl: Constructive Alignment and The SOLO Taxonomy: A Comparative Study of University Competencies in

	J07	Computer Science vs. Mathematics. Conferences in Research and Practice in Information Technology, Vol. 88. (2008).
■	16. C08	**Claus Brabrand**: Constructive Alignment for Teaching Model-Based Design for Concurrency. Invited Paper for Invited Talk for TeaConc'07. Proc. 2nd Workshop on Teaching Concurrency (TeaConc'07), Siedlce, Poland. (2007).
■■	15. J06	**Claus Brabrand**, Michael I. Schwartzbach: The metafront System: Safe and Extensible Parsing and Transformation. Science of Computer Programming 68(1): 2-20. (2007).
■	14. C07	**Claus Brabrand**, Bettina Dahl: Constructive Alignment and The SOLO Taxonomy: A Comparative Study of University Competencies in Computer Science vs. Mathematics. Keynote paper for Keynote at Koli'07, Koli National Park, Finland. (2007).
■	13. C06	**Claus Brabrand**, Robert Giegerich, Anders Møller: Analyzing Ambiguity of Context-Free Grammars. Proc. International Conference on Implementation and Application of Automata (CIAA), p. 214-225, LNCS 4783, Springer. (2007).
■	12. F01	**Claus Brabrand**, Jacob Andersen, Doina Bucur, Rune Thorbek: Teaching Teaching & Understanding Understanding. 19-minute award-winning educational short-film. Aarhus University Press. DVD. Epilogue by John Biggs. (2006).
■■	11. C05	**Claus Brabrand**, Anders Møller, Michael Schwartzbach: Dual Syntax for XML Languages. Proc. 10th International Symposium on Database Programming Languages (DBPL), p.27-41, LNCS 3774, Springer. (2005).
■■	10. J05	**Claus Brabrand**, Michael Schwartzbach, Mads Vanggaard: The metafront System: Extensible Parsing and Transformation. Electronic Notes in Theoretical Computer Science 82(3): 592-611. (2003).
■■	09. C04	**Claus Brabrand**, Michael Schwartzbach, Mads Vanggaard: The metafront System: Extensible Parsing and Transformation. Proc. 3rd Workshop on Language Descriptions, Tools, and Applications (LDTA), p. 67-85. (2003).
■	08. D01	**Claus Brabrand:** Domain Specific Languages for Interactive Web Services. Ph.D. Dissertation, BRICS International Ph.D. School, Aarhus University. (2003).
■	07. J04	**Claus Brabrand**, Anders Møller, Michael I. Schwartzbach: The <bigwig> project. ACM Transactions on Internet Technology 2(2): 79-114. (2002).
■	06. J03	**Claus Brabrand**, Anders Møller, Steffan Olesen, Michael I. Schwartzbach: Language-Based Caching of Dynamically Generated HTML. World Wide Web 5(4): 305-324 (2002).
■■	05. C03	**Claus Brabrand**, Michael Schwartzbach: Growing Languages with Metamorphic Syntax Macros. Proc. ACM SIGPLAN Workshop on Partial Evaluation and Semantics-Based Program Manipulation (PEPM), p. 31-40, ACM, Portland, OR, USA. (2002).
■	04. C02	**Claus Brabrand**, Anders Møller, Michael Schwartzbach: Static Validation of Dynamically Generated HTML. Proc. ACM SIGPLAN-SIGSOFT Workshop on Program Analysis for Software Tools and Engineering (PASTE), p. 38-45, ACM, Snowbird, UT, USA. (2001).
■	03. J02	**Claus Brabrand**, Anders Møller, Mikkel Ricky, Michael I. Schwartzbach: PowerForms: Declarative Client-Side Form Field Validation. World Wide Web 3(4): 205-214. (2000).
■	02. J01	**Claus Brabrand**, Anders Møller, Anders Sandholm, Michael I. Schwartzbach: A Runtime System for Interactive Web Services. Journal of Computer Networks 31(11-16): 1391-1401. (1999).
■	01. C01	**Claus Brabrand**, Anders Møller, Anders Sandholm, Michael Schwartzbach: A Runtime System for Interactive Web Services. Proc. 8th International World Wide Web Conference (WWW8), p. 313-323, Elsevier, Toronto, Canada. (1999).
■	00.	**Claus Brabrand:** Synthesizing Safety Controllers for Interactive Web Services. Master's Thesis, Aarhus University (1999).

LIST OF M=90 COURSES TAUGHT (incl. average student evaluations on a scale from 1 (worst) to 6 (best)):

Year	Course	Uni	ECTS	#	Level	Students	#	Rating
18- 24	24x Intro to Programming & Computational Thinking ☆	ITUPC	-	~250	Prof.	Non-IT professionals (esp. finance)	-	-
2024	CS1 Introductory Programming ☆	ITU	15	~150	BSc	Software Development students	TBA	**TBA**
2023	CS1 Introductory Programming ☆	ITU	15	158	BSc	Software Development students	70	**5.83***
2022	CS1 Introductory Programming ☆	ITU	15	147	BSc	Software Development students	54	**5.61**
2021	CS1 Introductory Programming ☆	ITU	15	154	BSc	Software Development students	22	**5.41***
2021	Intro to Programming for Company (full day) ☆	ITU	-	13	Prof.	Private BioMed Company	-	-
2020	CS1 Introductory Programming **(online!)** ☆	ITU	15	178	BSc	Software Development students	60	**5.85**
2019	CS1 Introductory Programming ☆	ITU	15	159	BSc	Software Development students	59	**5.47***
2019	Practical Concurrent & Parallel Programming	ITU	7.5	111	MSc	Software Development students	-	#
2019	CS0 BootIT (3-day Beginner Programming) ☆	ITU	-	48	BSc	Software Development students	34	**Q**
2018	Intro to Programming for Company (3 days) ☆	ITU	-	28	Prof.	Private Advertizement Company	13	**5.08***
2018	CS1 Introductory Programming ☆	ITU	15	161	BSc	Software Development students	87	**5.91**
2018	Automated Software Analysis	ITU	7.5	5	MSc	Software Development students	5	**6.00**
2018	Practical Concurrent & Parallel Programming	ITU	7.5	84	MSc	Software Development students	-	#

2018	IT-Camp (Programming for high-school girls) ☆	ITU	-	~30	K12	Female High-School students	-	**Q**
2018	CS0 BootIT (3-day Beginner Programming) ☆	ITU	-	52	BSc	Software Development students	31	**Q**
2018	IT-Camp (Programming for high-school girls) ☆	ITU	-	~30	K12	Female High-School students	-	**Q**
2017	CS1 Introductory Programming ☆	ITU	15	167	BSc	Software Development students	107	**5.71**
2017	Automated Software Analysis	ITU	7.5	18	MSc	Software Development students	12	**5.00**
2017	Practical Concurrent & Parallel Programming	ITU	7.5	80	MSc	Software Development students	-	**#**
2017	IT-Camp (Programming for high-school girls) ☆	ITU	-	~30	K12	Female High-School students	-	**Q**
2017	CS0 BootIT (3-day Beginner Programming) ☆	ITU	-	58	BSc	Software Development students	46	**5.17**
2017	IT-Camp (Programming for high-school girls) ☆	ITU	-	~30	K12	Female High-School students	-	**Q**
2017	CS1 Introductory Programming ☆	ITU	15	137	BSc	Software Development students	78	**5.87**
2016	Automated Software Analysis	ITU	7.5	18	MSc	Software Development students	12	**5.67**
2016	Practical Concurrent & Parallel Programming	ITU	7.5	80	MSc	Software Development students	-	**#**
2016	CS0 BootIT (3-day Beginner Programming) ☆	ITU	-	49	BSc	Software Development students	26	**5.64**
2015	CS1 Introductory Programming ☆	ITU	15	86	BSc	Software Development students	38	**5.79**
2015	Automated Software Analysis	ITU	7.5	?	MSc	Software Development students	8	**5.75**
2015	Tools & Methods for Detection of Errors	ITU	7.5	17	MSc	Software Development students	6	**5.83**
2014	Practical Concurrent & Parallel Programming	ITU	7.5	88	MSc	Software Development students	-	**#**
2014	CS1 Introductory Programming ☆	ITU	15	88	BSc	Software Development students	47	**5.66**
2014	Analysis/Test/Verification ~ Variability	ITU	-	~5	PhD	PhD students	*Unevaluated*	
2014	Interactive Web Services	ITU	7.5	20	MSc	Software Development students	4	**5.75***
2013	Global Software Development	ITU	7.5	65	MSc	Software Development students	15	**4.67***
2012	Scripting, Databases, & System Architecture ☆	ITU	7.5	86	MSc	Digital Design & Comm. students	40	**5.75**
2012	Global Software Development	ITU	7.5	31	MSc	Software Development students	4	**5.00***
2012	Interactive Web Services	ITU	7.5	51	MSc	Software Development students	18	**5.28**
2011	Scripting, Databases, & System Architecture ☆	ITU	7.5	92	MSc	Digital Design & Comm. students	41	**5.68**
2011	Interactive Web Services	ITU	7.5	42	MSc	Software Development students	8	**4.38**
2011	Advanced Models & Programs	ITU	7.5	32	MSc	Software Development students	5	**5.80**
2010	Dataflow Analysis	UFPE	-	~10	MSc	MSc Computer Science students	*Unevaluated*	
2010	First-Year Projects	ITU	7.5	50	BSc	Software Development students	32	**5.34**
2009	Project-work & Communication	ITU	7.5	51	BSc	Software Development students	20	**5.15**
2009	Advanced Models & Programs	ITU	7.5	12	MSc	Software Development students	4	**6.00**
2009	First-Year Projects	ITU	7.5	40	BSc	Software Development students	*Unevaluated*	
2008	Seminar on Teaching/Learning	ITU	7.5	39	PhD+	Uni. faculty (all new ITU faculty)	*Eval missing?*	
2008	Project-work & Communication	ITU	7.5	46	BSc	Software Development students	5	**5.60**
2008	Programming Paradigms (2 weeks)	AAU	3	~50	BSc	Software Development students	*Eval missing?*	
2008	Advanced Models & Programs	ITU	7.5	20	MSc	Software Development students	4	**6.00**
2008	First-Year Projects	ITU	7.5	34	BSc	Software Development students	*Unevaluated*	
2008	Seminar on Teaching/Learning	ITU	-	73	PhD+	University Faculty (all ITU faculty)	45	**5.00**
2007	Project-work & Communication	ITU	7.5	41	BSc	Software Development students	10	**5.50**
2007	Programming Paradigms (2 weeks)	AAU	3	~50	BSc	Software Development students	*Eval missing?*	
2007	Concurrency	AU	5	29	BSc	Technical IT Engineering students	23	**5.34**
2006	Programming Paradigms (2 weeks)	AAU	3	~50	BSc	BSc Computer Science students	*Eval missing?*	
2006	Semantics	AU	5	92	BSc	Computer Science students	36	**5.26**
2006	Programming Languages	AU	5	58	BSc	Computer Science students	36	**5.14**
2006	University Studies in Education	AU	-	30	PhD+	University CS Faculty	19	**5.54***
2006	Concurrency	AU	5	17	BSc	Technical IT Engineering students	16	**5.14**
2005	Semantics	AU	5	120	BSc	Computer Science students	47	**5.12**
2005	Concurrency	AU	5	26	BSc	Technical IT Engineering students	24	**5.25**

2005	Macro Seminar	AU	5	6	MSc	Computer Science students	*Unevaluated*	
2004	Concurrency	It-vest	5	23	MSc	EVU Professional Students	14	**4.71**
2004	Web Technology	It-vest	5	24	MSc	EVU Professional Students	19	**5.01**
2004	Concurrency	AU	10	30	BSc	Technical IT Engineering students	10	**4.97**
2002	Macros & Language Transformation (2 weeks)	AU	-	~30	BSc	Computer Science students	*Unevaluated*	
22yrs	**90 Courses**	**6 Unis**	**431**	**4K**	**Misc.**	**Various types of learners**		**~5.5**

ITU=IT U. of Copenhagen; AU=Aarhus U.; AAU=Aalborg U.; UFPE=Federal U. of Pernambuco, Brazil; ITUPC = ITU Prof. Courses. **5.91**) All-time ITU record for a big course; **#)** Evaluated before my teaching; ***)** Evaluation also depends on others. **Q)** Qualitative evaluation; no quantitative data. ☆) Teaching beginners how to program.

SCIENTIFIC METRICS

H-Index:	**25** (according to Google Scholar)
Citation count:	**2,368** (according to Google Scholar)

#Publications:	**67** (according to List of Publications above)
DBLP:	**https://dblp.uni-trier.de/pid/61/6274.html**
Google scholar:	**https://scholar.google.com/citations?user=oxk_o-UAAAAJ**