

Educationally focused Curriculum Vitae

((Claus Brabrand))

PERSONAL INFO

Full name:	Claus Brabrand
Date of birth:	May 20, 1973
Nationality:	Danish
Lived in:	Sweden (7½ y), France (2 y), Brazil (6 m) & USA (3 m)
Civil status:	Married, three children (aged 15, 7, and 4)

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

PH.D. DISSERTATION

Dissertation:	<i>"Domain Specific Lang's for Interactive Web Services"</i>
Supervisor:	Michael I. Schwartzbach

POSITIONS

Starting soon:	Head of Center for Computing Education Research , IT University of Copenhagen
2017 – 2019 (3 years):	Head of SQUARE (research group), IT University of Copenhagen, Denmark
Since Sep 2007 (12 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

RESEARCH INTERESTS

Educational Research (including Computing Education Research)
Programming Languages (including DSLs) <i>and</i> Static Analysis
Web Technology <i>and</i> Variability (including Software Product Lines)

EDUCATIONAL PUBLICATIONS

Claus Brabrand & Bettina Dahl: <i>"Analyzing CS Competencies using The SOLO Taxonomy"</i> , keynote abstract for Keynote talk at ITiCSE'09, Paris, France (July 6, 2009).
Claus Brabrand & Bettina Dahl: <i>"Constructive Alignment and The SOLO Taxonomy: A Comparative Study of University Competencies in Computer Science vs. Mathematics"</i> , keynote paper for keynote talk at Koli'07, Koli National Park, Finland, (Nov. 16, 2007). Also in Conferences in Research and Practice in Information Technology, Vol. 88, 2008.
Claus Brabrand : <i>"Constructive Alignment for Teaching Model-Based Design for Concurrency"</i> , invited paper for invited talk at TeaConc'07, Siedlce, Poland (June 25, 2007). Also in Transactions on Petri Nets and Other Models of Concurrency (ToPNoC), Vol. 1(1) , Springer-Verlag, 2008.
Claus Brabrand & Bettina Dahl: <i>"Using the SOLO Taxonomy to Analyze Competence Progression of University Science Curricula"</i> , Higher Education , Vol. 58(4), p. 531-549, Springer 09.

LANGUAGES

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

PH.D. STUDENTS

Finished 2017:	Jean Melo , advised with Andrzej Wasowski. IT University of Copenhagen, Denmark. Studied variability bugs from the programmer's perspective.
Finished 2017:	Iago Abal , advised with Andrzej Wasowski. IT University of Copenhagen, Denmark. Built bug finder analysis tool that has found several bugs in Linux.
Finished 2013:	Jakob Grauenkjær Thomsen , advised with Erik Ernst, Aarhus University, Denmark. Developed code which is now actively running in Google Maps.
Finished 2012:	Márcio Ribeiro , advised with Paulo Borba, Universidade Federal de Pernambuco, Brazil. Won "Best Dissertation in all of Brazil 2012".

AWARDS & RECOGNITION

Sep 30, 2020:	Danish National Teaching Award 2020 (aka, Best Teacher in all of Denmark), handed over by Princess Mary of Denmark and the Minister of Higher Education and Science, Denmark
Sep 27, 2019:	Excellence in Teaching (aka, Teacher of the Year Award), IT University of Copenhagen
Oct 23, 2014:	German IT-Security Award (runner up) for "SPL-lift". Awarded €60,000 EUR (= ca. 450,000 DKK). With Eric Bodden (lead), Márcio Ribeiro, Társis Tolêdo, Paulo Borba, and 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 tool: <i>"A Tool for Improving Maintainability of Preprocessor-based Product Lines"</i> .
Nov 13, 2006:	Awarded "The Golden Ratio" award (2006) for the 20-minute educational short-film: <i>"Teaching Teaching & Understanding Understanding"</i> .

STAYS ABROAD

Jun-Dec 2010 (6 months):	Visiting Professor, Universidade Federal de Pernambuco (UFPE), Recife, PE, 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

SCIENTIFIC METRICS

H-Index:	22 (according to Google Scholar)
# Citations:	1,712 (according to Google Scholar)
# Publications:	48 (according to DBLP)
List of Publications:	DBLP: (https://dblp.uni-trier.de/pid/61/6274.html) Google Scholar: (https://scholar.google.com/citations?user=oxk_o-UAAAAJ)

EDUCATIONAL KEYNOTES

July 6, 2009 (keynote):	ITiCSE 2009: Int'l Conf. on Innovation and Technology in Computer Science Education ; Paris, France
Nov. 16, 2007 (keynote):	Koli Calling 2007: Int'l Conf. 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 around the world for <i>educational development</i> . Sold approximately 6,000 DVDs (sold out three times) at production cost. Watched 961,258 times (according to aggregated view count of all languages on YouTube).

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 Danish Technical University (DTU).
Oct 3, 2016 Mar 8, 2017 Oct 9, 2018 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 <i>"external examiner"</i> .)
Aug 2017 Aug 2016 Aug 2015 Aug 2014	"Constructive Alignment & the SOLO Taxonomy" . Seminar for new faculty at the IT University of Copenhagen.
Aug 3, 2010 Sep 22, 2009	"Constructive Alignment & the SOLO Taxonomy" . Seminar at the Federal University of Pernambuco, Brazil & Reykjavik University, 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 <i>"how to make course descriptions"</i> .)
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 <i>"Teaching Teaching ...for Computer Scientists"</i> with Torben K. Jensen for all faculty at the Dept. of Computer Science at Aarhus University and presented the <i>"Theory of Didactic Situations"</i> .
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 : (3 courses, 2020) (3 courses, 2019) (3 courses, 2018)	"Introduction to Programming & IT-Thinking" : 5-day course designed to teach professionals (esp. financial sector employees) how to program & how to take advantage of programming in their work.

*) Efforts contributing to **more than doubling #women** (from 10% to 27% **women**) on the Bachelor of Software Development (at IT Uni of Copenhagen)

GENERAL TEACHING EXPERIENCE

Fall 2014 – 2020:	Introductory Programming (1 st 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:	Macro Languages (2 weeks, Aarhus Uni.)

RECENT TEACHING EVALUATIONS

6.00 (1.00-6.00)	Automated Software Analysis (master course, ITU)
5.91 (1.00-6.00)	Introductory Programming (1 st semester course, ITU)
5.87 (1.00-6.00)	Introduction to Programming & IT-Thinking (ITU)

(Recent quantitative student evaluations of my teaching at ITU.)