

CHRISTOFFER OLLING BACK

Denmark ◊ U.S.A.

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ORCID ID: 0000-0001-7998-7167

PhD researcher focusing on business process modeling and process mining: a form of data mining which extracts interpretable business process models from event logs for predicting outcomes, prescribing courses of action, and process optimization and re-engineering.

In addition to my academic pursuits, I am trained as a glass artist and have developed a novel digital fabrication technology for shaping glass. Before returning to academia, I spent a few years building a small business and independently developing this technology.

EDUCATION

PhD Computer Science UNIVERSITY OF COPENHAGEN, DENMARK *(in progress) 2017-2020*

Hybrid Business Process Management Technologies project

Coursework: Deep Learning, Machine Learning, Mathematical Logic, Process Mining, Responsible Conduct of Research

MSc Artificial Intelligence UNIVERSITY OF EDINBURGH, UK *2011*

Coursework: Adaptive Learning Environments, Agent-based Systems, Applied Machine Learning, Automated Planning, Economics, Text Technologies (NLP), Java Programming, etc.

MSc Thesis: *Modeling Strategic Negotiation Behavior in Colored Trails*

BA Psychology LEWIS & CLARK COLLEGE, USA *2008*

Coursework: Artificial Intelligence, Cognition, Computer Science 1 & 2, Human Computer Interaction, Psychology Methodology, Statistics, Physiological Psychology, Social Psychology, etc.

OTHER EDUCATION & AWARDS

Supplementary Coursework: Mathematics ROSKILDE UNIVERSITY, DENMARK *2016*

Coursework: Ind. Project: “*Mathematical Foundations of Probabilistic Topic Modeling*”, Mathematical Modeling & Dynamic Systems (diff. eq.), Mathematical Analysis 1 (real analysis)

BA Applied Art (Glass) ROYAL DANISH ACADEMY OF FINE ART, SCHOOL OF DESIGN *2012*

Coursework: Glassblowing, Casting, Coldworking, Equipment Maintenance, Flameworking, Graphic Design, Kiln-forming, Marketing & Intellectual Property.

Awards & Scholarships

Nordea Fonden Scholarship (University of Edinburgh) *2010*

Dean’s Honor List (Lewis & Clark College) *2007*

Prairie State Achievement Award, Illinois State Scholar (High School) *2003/4*

PUBLICATIONS

Back C.O., Debois S., Slaats T. (2018) Towards an Empirical Evaluation of Imperative and Declarative Process Mining. In: Woo C., Lu J., Li Z., Ling T., Li G., Lee M. (eds) *Advances in Conceptual Modeling*. ER 2018. Lecture Notes in Computer Science, vol 11158. Springer, Cham

Back C.O., Debois S., Slaats T. (2018) Towards an Entropy-Based Analysis of Log Variability. In: Teniente E., Weidlich M. (eds) *Business Process Management Workshops*. BPM 2017. Lecture Notes in Business Information Processing, vol 308. Springer, Cham

SOFTWARE github.com/backco

- **eventropy** Entropy estimation for event logs and other sequential data 2018
- **logtrie** Fast, prefix tree data structure for event logs and other sequential data 2017/8
- **qmpm** Quality metrics for process mining/process models 2017/8

TEACHING

Assistant Teacher *University of Copenhagen, 2018*

- *Software Engineering* (MSc course)

Tutor for two BSc students *University of Copenhagen, 2018*

- *Principles of Programming*
- *Software Development*
- *Linear Algebra in Computer Science*

Tutor for two Danish high school students (*English*) *Private, 2014 - 2015*

WORK EXPERIENCE

Olling Glass (olling.co) 2009 - Present
Founder - Design/production of glass products using digital fabrication technology. *Sj. Odde, Denmark*

Back Electronics A/S 2008 - 2017
Electronics Technician *Birkerød, Denmark*

Hempel Glass Museum 2013 - 2014
Demonstrator *Nykøbing Sj., Denmark*

Glashytten 2012 - 2013
Production Assistant *Nykøbing Sj., Denmark*

VOLUNTEER WORK

Geopark Odsherred Streger Danish/English translation 2015 - present

Lewis & Clark College Student Cooperative 2006-2008
IT-Coordinator: Maintenance of Linux based desktops and POS system. *Portland, OR, USA*

SKILLS

Programming Arduino, C#, C, F#, Gnuplot, Java, L^AT_EX, , PGF/TikZ, Python, UML
Mathematics Calculus, Differential Equations, Information Theory, First-Order Logic,
Linear Algebra, Probability Theory, Statistics & Bayesian Inference, Real Analysis
Design, etc. Glassworking, Illustrator/Inkscape, OpenSCAD, Photoshop/GIMP, 3D Printing

LANGUAGE PROFICIENCY

English Mother tongue **Norwegian** Intermediate **Spanish** Elementary
Danish Mother tongue **Swedish** Basic **Japanese** Elementary

ART EXHIBITIONS

2010 Galleri Rasch **2013** Allé Optik **2016** Galleri Arta 22
2012 Bornholms Kunstmuseum **2013** Laugesen Opvisning **2016** Laugesen Opvisning
2012 Svanekegården **2014** Kulturkasernen 2016 **2018** Galleri Arta 22
2012 Danmarks Designskole **2015** Galleri Juel Verland Art