

Jonas Toft Arnfred

CONTACT INFORMATION	Jonas Toft Arnfred 14/4 Henderson Street EH6 6BS Edinburgh United Kingdom	<i>Phone:</i> (+44) 744 259 1386 <i>E-mail:</i> jonas@ifany.org <i>www:</i> www.ifany.org <i>Github:</i> github/arnfred
EDUCATION	l'Ecole Polytechnique Federale de Lausanne , Switzerland <i>MSc and BSc in Computer Science</i>	2008 to 2013
PROFESSIONAL EXPERIENCE	Amazon Development Centre Scotland , Scotland <i>Software Development Engineer</i> At Amazon I'm leading the team responsible for the implementation and operation of a rendering stack used across several teams for showing featured and similar products across the retail web page. I have spearheaded the use of <i>Scala</i> and <i>Akka</i> to take advantage of the actor model for concurrency and <i>Scala's</i> type system to gain static guarantees. Prior to this I led the transition of a browser application with a complex UX from ad-hoc callbacks to a proper event driven design based on functional reactive programming using <i>Bacon.js</i> allowing us to deliver new features and exceed performance goals.	January 2015 to Now
	Illinois University Urbana-Champaign: ADSC , Singapore <i>Software Engineer & SIGPA Awardee</i> I wrote my master's thesis at ADSC and was offered a position as a software engineer afterwards. The thesis led to a publication at <i>ACPR 2013</i> . In the role as software engineer I continued my own research in computer vision, focusing on feature matching and image classification leading to several publications. From December 2013 to April 2014 I went traveling and was reemployed with ADSC upon my return to Singapore.	February 2013 to December 2014
	Google Summer of Code <i>Parser Combinator Debuggers for Scala</i> Over the summer of 2012 I was sponsored by Google to work on the functional programming language <i>Scala</i> implementing a debugger for their parser combinator library.	Summer 2012
	Not Web Design , Salobrena, Andalucia, Spain <i>Full Stack Web Developer</i> At Not Web Design I was responsible for developing web sites using the LAMP stack as well as frontend work in Javascript.	January 2008 to August 2008
SKILLS AND INTERESTS	Technologies I am a polyglot programmer with an interest in functional programming. I have worked extensively with <i>Scala</i> and <i>Akka</i> building highly concurrent systems with strong static guarantees. In addition I'm comfortable with <i>Python</i> , <i>Javascript</i> , <i>PHP</i> , <i>Haskell</i> , <i>Matlab</i> , <i>C</i> , <i>Java</i> , <i>Unix shell scripting</i> and <i>Tex</i> . I have research experience in <i>Computer Vision</i> and <i>Machine Learning</i> and have worked with <i>Spark</i> and <i>Hadoop</i> as well as <i>Pandas</i> , <i>Scipy</i> and <i>OpenCV</i> . I am a heavy user of <i>Git</i> and <i>Vim</i> and familiar with the pros and cons of <i>SQL</i> and <i>NoSQL</i> .	
	Languages I speak <i>Danish</i> , <i>English</i> , <i>French</i> and <i>Spanish</i> after having lived in Denmark, USA, France, Spain, Switzerland, Chile, Singapore and Scotland. My proficiency of <i>French</i> and <i>Spanish</i> is more than adequate for verbal interaction, but insufficient for written communication.	
PUBLICATIONS	J. T. Arnfred, S. Winkler. A general framework for image feature matching without geometric constraints. <i>Pattern Recognition Letters</i> , vol. 73, pp. 26-32, April 2016.	

J. T. Arnfred, S. Winkler. [Fast-Match: Fast and robust feature matching on large images](#). Proc. IEEE International Conference on Image Processing (ICIP), Quebec City, Canada, Sept. 27-30, 2015.

V. Vonikakis, R. Subramanian, J. T. Arnfred, S. Winkler. [Modeling Image Appeal Based on Crowd Preferences for Automated Person-Centric Collage Creation](#). Pattern Recognition Letters, 2016.

J. T. Arnfred, S. Winkler, S. Süssstrunk. [Mirror Match: Reliable feature point matching without geometric constraints](#). Proc. 2nd IAPR Asian Conference on Pattern Recognition (ACPR), Okinawa, Japan, Nov. 5-8, 2013.