

EVAN KOH CHUAN HOCK

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EDUCATION	<p>PhD Candidature – Computational Science (CAP: 4.58 out of 5.0) National University of Singapore, August 2008 – September 2012</p> <p>Visiting Graduate Student (Developed two software and authored four research articles) University of Tokyo, June 2009 – March 2011</p> <p>Bachelor of Computing in Computational Biology (Second Upper Class Honors - CAP: 4.18 out of 5.0) National University of Singapore, July 2004 – June 2008</p> <p>Diploma in Multimedia & Infocomm Technology With Merit (Graduated as 2nd in Cohort) Nanyang Polytechnic, July 1999 – June 2002</p>
AWARDS	<p>Recognized for consistently performing beyond expectation, December 2013 Rakuten "Delight the Customer" Award, Second Prize</p> <p>Granted Scholarship for PhD study, August 2008 (approx. SGD 250,000) National University of Singapore Graduate School for Integrative Sciences and Engineering</p> <p>Top two students in the Undergraduate Research Opportunity Program, June 2008 Defence Science & Technology Agency Prize</p> <p>Top 2nd person in graduating cohort, August 2002 IBM Singapore Silver Medal</p> <p>Most outstanding Final Year Project in graduating cohort, August 2002 IBM Singapore Book Prize</p>
PERSONAL ACHIEVEMENTS	<p>Undergraduate Graduation Representative due to Excellence in both Research & Sports, July 2008 Chosen among 8,733 to meet the President of Singapore and interviewed by a National Newspaper</p> <p>Ironman Langkawi, February 2007 Completed the extreme triathlon comprising of a 3.8km swim, 180.2km cycle, 42.2km run</p> <p>2009 World Games Kaohsiung Pre-event, October 2006 Chosen to represent Singapore in the Dragon Boat World Championship Pre-event held in Taiwan</p>
WORK EXPERIENCE	<p>Rakuten Inc., August 2013 – July 2013 Data Scientist in a company that owns very diverse businesses (such as E-commerce, E-book etc) Optimizing Rakuten Ichiba's Ad platform (such as paid search ranking logic, optimal ad pricing) Propose and execute customer acquisition and nurturing strategies/algorithms for Kobo businesses</p> <p>DeNA Co Ltd., October 2012 - August 2013 Web engineer in an IT company with the main revenue coming from mobile games Involved in the Mixi-Mobage project and devised the game popularity ranking algorithm (Utilized Pig and Hive to implement and validate the ranking algorithm)</p>
PART-TIME, INTERNSHIP AND RESEARCH EXPERIENCE	<p>PhD Thesis, August 2008 – September 2012 Key objective is to understand stochastic biological systems from noisy and high dimensional data Devised effective tools and practical algorithms to estimate and analyze biological systems computationally Developed algorithms to accurately and efficiently interpret stochastic simulation results in any domain</p> <p>Four Elements Capital Ltd., March 2012 – May 2012 Systematic Commodity Hedge Fund - Research Analyst (Intern) Gather and analyze data for the Grains industry Based on the findings, improve current indicators and develop new indicators</p> <p>HedgeSPA Pte. Ltd., December 2011 – February 2012 Risk Analysis Software Development Firm - Software Developer (Part-time) Responsibilities mainly involve back-end performance tuning and testing (in C) Managed to reduce performance time of numerous functions by more than 50%</p> <p>Google Summer of Code 2011, April 2011 – August 2011 Chosen from thousands globally to be funded by Google to participate in an open source project, BioJava Long distance supervision by mentors from UK and US whom I have never met prior to the project Underwent the full cycle of software development, from planning to testing and deployment</p> <p>Kent Ridge Digital Labs (Currently known as I2R), October 2001 – November 2001 Quickly learned the ropes of doing research at the cutting edge of Bioinformatics Developed a sophisticated analytical software for DNA analysis in just 8 weeks using C++ Led to my first publication before I even commenced university studies</p>

TEACHING AND PRESENTATION EXPERIENCE	<p>National University of Singapore, August 2008 – December 2008 Teaching assistant for "Introduction to Computing" module to non-computing students General consensus of end-semester students' feedback: <i>A friendly and approachable tutor</i></p> <p>Third Universitas 21 Undergraduate Research Conference, October 2007 One of the three representatives selected from the whole of NUS to present my research in Canada to an international audience from widely varying academic backgrounds</p> <p>Nanyang Polytechnic, July 1999 – June 2002 Selected to be a member of the Student Support Network Provided weekly tutoring service to fellow students who were academically weaker</p>
SCIENTIFIC SOFTWARE	<p>Lead Engineer</p> <p>Biological Sequence Analysis – Sirius PSB A software to enable biologists to carry out predictive modeling on biological data</p> <p>Biological Pathway Model Checker – Mirach Efficiently and accurately validate behaviors/properties of computational biological models</p> <p>Parameter Estimation of Computational Biological Models – DA1.0 Parameter estimation under real-life limitations</p> <p>Significant Contributor</p> <p>Framework for Processing and Analyzing Biological Data – BioJava To facilitate rapid application development for bioinformatics</p>
RESEARCH PUBLICATIONS	<p>Predictive Modeling</p> <p>Experimental validation of computational predictions made using software developed by me PNAS, 109(39), 15781-6, 2012</p> <p>Overcome a persistent problem in microarray data called batch-effect using a creative approach BMC Systems Biology, 6(Suppl 2):S3, 2012</p> <p>Proposed a theoretical way to determine the optimal number of features for prediction models Electronics Letters, 47(8), 480-2, 2011</p> <p>Built a prediction system to accurately predict the polyadenylation site of Arabidopsis Genome Informatics, 19, 73-82, 2007</p> <p>Monte Carlo Methods</p> <p>Sequential hypothesis algorithms that are efficient and accurate in any situations BMC Bioinformatics, 13(Suppl 17):S15, 2012</p> <p>Utilized model checking to perform parameter estimation in the absence of time-series data Molecular Biosystems, 7(5), 1576-92, 2011</p> <p>Developed an efficient and accurate model checking framework for Monte Carlo simulation results Bioinformatics, 27(5), 734-5, 2011</p> <p>Sequential Monte Carlo algorithm for parameter estimation under real-life limitations Bioinformatics, 26(14), 1794-6, 2010</p> <p>Software</p> <p>An open source Java framework for analyzing biological data Bioinformatics, 28(20), 2693-5, 2012</p> <p>Developed a software that can easily generate predictive models on biological sequence data Journal of Bioinformatics and Computational Biology, 7(6), 973-90, 2009</p> <p>A computational analysis of the human promoter regions In Silico Biology, 4(2), 109-25, 2004</p>
WEBSITE (HOBBY)	<p>Lead Engineer (built together with my wife)</p> <p>travelcafe.me A travel journal to document your memories as well as to share places and experiences with friends (Built with PHP and MySQL on Amazon Web Services)</p> <p>kchmemcafe.appspot.com (Still developing) A private photo hosting site for you to share photos with your loved ones easily. (Built with Java and Google BigTable on Google App Engine)</p>
LANGUAGE SKILLS	<p>English - Spoken, written and reading (Fluent)</p> <p>Mandarin - Spoken, written and reading (Fluent)</p> <p>Japanese - Spoken, written and reading (Intermediate)</p>