Sarah A. Christensen

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E D U C A T I O N

UNIVERSITY OF ILLINOIS   **Urbana-Champaign, Illinois**
*PhD Candidate in **Computer Science** Advised by Mohammed El-Kebir and Tandy Warnow*   August 2016 – Present
- My research is in the intersection of theoretical computer science and computational biology; in particular, I develop efficient algorithms to support biological and oncological research.
- Cumulative GPA: 3.95/4.0; Chirag Fellowship (2016-2018), State Farm Doctoral Award (Spring 2018), C.L. and Jane Liu Award (Spring 2018), Ira & Debra Cohen Graduate Fellowship (Spring 2019).

AMHERST COLLEGE   **Amherst, Massachusetts**
Bachelor of Arts with Distinction   September 2009 – May 2013
- Major: **Mathematics**; Cumulative GPA: 3.83/4.0; Major GPA: 3.97/4.0
- Member of The Phi Beta Kappa Society; Top 10% of graduating class

W O R K   &   R E S E A R C H   E X P E R I E N C E

MCKINSEY & COMPANY   **New York, New York**
Summer Associate   May 2020–July 2020
- Collaborated with clients and vendors to build climate change modelling capabilities that predict various asset risks.

KALLYOPE   **New York, New York**
Computational Genetics Research Intern   August 2018–December 2018
- Designed a novel graph algorithm to efficiently delineate correlated regions of the human genome within finite populations. Implemented a parallelized version of the algorithm in C++. Accepted talk at ASHG with journal publication forthcoming.

CORNERSTONE RESEARCH   **New York, New York**
Economic Consulting Senior Analyst   July 2013 – July 2016
- Structured open-ended analytical tasks, synthesizing the results into intuitive visual exhibits. Presented results at client and expert meetings. Managed junior analysts in data collection and econometric analysis.

MASSACHUSETTS GENERAL HOSPITAL   **Boston, Massachusetts**
Research Assistant in the Division of General Medicine   May 2012–August 2012
- Analyzed the cost-effectiveness of deploying a new assay technology in antenatal clinics using Monte Carlo simulations.

YALE SCHOOL OF PUBLIC HEALTH   **New Haven, Connecticut**
Research Assistant to Professor Alison Galvani   May 2011–August 2011
- Performed meta-analysis on key influenza transmission model parameters to access robustness of modeling predictions.

P U B L I C A T I O N S

- Christensen S., Kim J., Chia N., Koyejo O., El-Kebir M. (2020) Detecting Evolutionary Patterns of Cancers using Consensus Trees. *Proceedings of the European Conference on Computational Biology (ECCB)*.

- Yu X., Le T., Christensen S., Molloy E.K., Warnow T. (2020). Advancing Divide-and-Conquer Phylogeny Estimation using Robinson-Foulds Supertrees. *Proceedings of the 20th International Workshop on Algorithms and Bioinformatics*.

- Christensen S., Leiserson M.D.M., El-Kebir M. (2020). PhySigs: Phylogenetic Inference of Mutational Signature Dynamics. *Proceedings of the Pacific Symposium on Biocomputing (PSB)*.

- Christensen S., and McManus J. (2019) Universal LD Blocks in the Human Genome. Accepted platform talk at the 69th Annual Meeting of *The American Society of Human Genetics (ASHG)*. Houston, Texas.

- Christensen S., Molloy E.K., Vachaspati P., Warnow T. (2019) TRACTION: Fast Non-Parametric Improvement of Estimated Gene Trees. *Proceedings of the 19th International Workshop on Algorithms and Bioinformatics*.

- Christensen S., Molloy E.K., Vachaspati P., Warnow T. (2018) OCTAL: Optimal Completion of Gene Trees in Polynomial Time. *Algorithms for Molecular Biolog*y.

- Christensen S., Molloy E.K., Vachaspati P., Warnow T. (2017) Optimal Completion of Incomplete Gene Trees in Polynomial Time using OCTAL. *Proceedings of the 17th International Workshop on Algorithms and Bioinformatics*.

- Ciaranello AL, Myer L, Kelly K, Christensen S, Daskilewicz K, et al. (2015) Point-of-Care CD4 Testing to Inform Selection of Antiretroviral Medications in South African Antenatal Clinics: A Cost-Effectiveness Analysis. *PLoS ONE*.