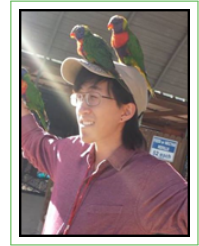


Hugh Chen

Curriculum Vitae

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Education

- 2018–**** **PhD in Computer Science**, *University of Washington*, Seattle, WA, GPA 3.79.
- 2016–2018 **MS in Statistics**, *University of Washington*, Seattle, WA, GPA 3.77.
- 2012–2016 **BA in Computer Science**, *UC Berkeley*, Berkeley, CA, GPA 3.85.

Honors and Awards

- 2017–2022 **Recipient of NSF Graduate Research Fellowship**.
- 2017–2017 **Travel Award**, *NIPS Machine Learning for Health Workshop*.
- 2016–2016 **High Distinction in General Scholarship**, *University of California, Berkeley*.
- 2015–2016 **EECS Honors Program**, *University of California, Berkeley*.
- 2014–2016 **President of CS Honors Society (UPE)**, *University of California, Berkeley*.

Research Projects

- 2020 **True to the Model or True to the Data?**, *Hugh Chen**, *Joseph D. Janizek**, *Scott Lundberg*, *Su-In Lee*. *ICML Workshop on Human Interpretability 2020*.
- 2020 **Deep Transfer Learning for Physiological Signals**, *Hugh Chen*, *Scott Lundberg*, *Gabe Erion*, *Jerry H. Kim*, *Su-In Lee*. *ACM CHIL Workshop 2020*.
- 2020 **Explaining Models by Propagating Shapley Values of Local Components**, *Chen, Hugh*, *Scott Lundberg*, and *Su-In Lee*. *AAAI Health Intelligence 2020*.
- 2020 **Explainable AI for Trees: From Local Explanations to Global Understanding**, *Scott Lundberg*, *Gabriel Erion*, *Hugh Chen*, *Alex DeGrave*, *Jordan M. Prutkin*, *Bala Nair*, *Ronit Katz*, *Jonathan Himmelfarb*, *Nisha Bansal* and *Su-In Lee*. *Nature Machine Intelligence 2020*.
- 2017 **Anesthesiologist-level forecasting of hypoxemia with only SpO2 data using deep learning**, *Gabriel Erion*, *Hugh Chen*, *Scott Lundberg* and *Su-In Lee*. *NIPS ML4H*.
- 2017 **Hybrid Gradient Boosting Trees and Neural Networks for Forecasting Operating Room Data**, *Hugh Chen*, *Scott Lundberg*, *Su-In Lee*. *NIPS ML4H*.
- 2017 **Checkpoint Ensembles: Ensemble Methods from a Single Training Process**, *Hugh Chen*, *Scott Lundberg*, *Su-In Lee*. *arXiv preprint arXiv:1710.03282*.

- 2016 [Probabilistic Model-Based Approach for Heart Beat Detection](#), *Hugh Chen, Yusuf B. Erol, Eric Shen, Stuart Russell. Physiological Measurement, Vol. 37, No. 9, August 2016* [Code](#).

Experience

Research

- 2016–201* **Research Assistant**, *University of Washington*, Dr. Su-In Lee.
Two primary research directions: machine learning for operating room data involving transfer/representation learning and interpretable machine learning (feature attributions).
- 2015–2016 **Research Assistant**, *University of California, Berkeley*, Dr. Stuart Russell.
Worked on probabilistic modeling techniques (dynamic bayesian network) and state estimation (particle filter, Rao-Blackwellized particle filter) for health applications.
- 2013–2013 **Research Assistant**, *University of Arizona, Tucson, AZ*, Dr. Hsinchun Chen.
Worked on parsing international hacker forums for cybersecurity applications.

Teaching

- 2020–2020 **Teaching Assistant**, *Computational Biology*, Dr. Su-In Lee.
- 2015–2015 **Teaching Assistant**, *Discrete Math and Probability*, Dr. Umesh Vazirani.
- 2013–2013 **Grader**, *Structure and Interpretation of Computer Programs (Self-Paced)*.

Industry

- 2014–2014 **Software Engineering Intern**, *Location Labs*, Emeryville, CA.
Backend development (Restful Web API) as well as web development.

Side Projects

- 2019 [Exploration of a Parameter and Inference Server](#), *Hugh Chen and Ayse Dincer*.
- 2017 [Implementation of Stochastic Gradient Descent Variants](#), *Hugh Chen*.
- 2017 [Implementation of Nonparametric \(neural networks, KNNs, and decision trees\) Methods](#), *Hugh Chen*.
- 2016 [MAX-SAT Algorithms Survey](#), *Hugh Chen, Yiwen Song*.

Languages

- Expert **Python, C, C++, Java, Julia, R, Matlab, Git, and Latex.**
- Intermediate **Scheme, HTML, CSS, MIPS.**