

KANIT "HAM" WONGSUPHASAWAT (RESUME)

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EDUCATION

University of Washington (2018)

MS & PhD Computer Science & Engineering
Area: HCI, Data Visualization, Data Science
Advisor: Dr. Jeffrey Heer ★ **Dissertation Award**

Stanford University (2013)

MS Management Science & Engineering
Area: HCI, Entrepreneurship
★ **Awarded Fulbright Fellowship**

Chulalongkorn University (2010)

BEng Computer Engineering
★ **Awarded Gold Medal & HM The King Scholarship (ranked 1st of 800+ students)**

RECENT EMPLOYMENT

Apple Inc. – Research Scientist, Technical Lead

2018-Present

- Lead a team to research and develop data visualization and interactive tools for data science and machine learning

Interactive Data Lab, University of Washington – Graduate Researcher (Data Visualization Tools)

2013-2018

- Led the design, development, and evaluation of Voyager, a recommendation-powered visualization tool for exploratory data analysis – manage a team of 5 developers (★ **Won Knight Prototype Grant, adopted by Jupyter data science community**)
- Co-led the design & development of the Vega-Lite grammar for interactive visualizations – co-manage a team of 7 developers (**1M jsDelivr downloads/month, shipped with JupyterLab, wrapped in Python as Altair, used at Apple, Google, Microsoft, Netflix, and Twitter**)
- Conducted interviews with data scientists to understand current practices and difficulties in exploratory data analysis

Google Inc. – Software Engineering Intern (Big Picture Group, Google Research)

2015

- Led the design & development of TensorFlow Graph Visualizer, a tool to visualize dataflow graphs of deep learning models (with Dr. Martin Wattenberg, Dr. Fernanda Viégas & Google Brain) – **Shipped with TensorBoard (TensorFlow's official dashboard tool)**

Trifacta Inc. – Software Engineering Intern (Research & Development)

2014

- Designed & prototyped intelligent user interfaces for data cleaning and transformations

Tableau Software Inc. – Research Intern (Visual Analysis Team)

2013

- Designed & prototyped chart recommender system (with Dr. Jock Mackinlay & Dr. Anushka Anand) ★ **US Patented**

SELECTED PUBLICATIONS

mage: Fluid Moves Between Code and Graphical Work in Computational Notebooks

M. Kery, D. Ren, F. Hohman, D. Moritz, K. Wongsuphasawat, K. Patel. ACM User Interface Software and Technology (UIST) 2020.

Understanding and Visualizing Data Iteration in Machine Learning

F. Hohman, K. Wongsuphasawat, M. Kery, K. Patel. ACM Human Factors in Computing Systems (CHI) 2020.

Tempura: Query Analysis with Structural Templates

T. Wu, K. Wongsuphasawat, D. Ren, K. Patel, C. Dubois. ACM Human Factors in Computing Systems (CHI) 2020.

Voyager 2: Augmenting Visual Analysis with Partial View Specifications

K. Wongsuphasawat, et al. ACM Human Factors in Computing Systems (CHI) 2017.

Voyager: Exploratory Analysis via Faceted Browsing of Visualization Recommendations

K. Wongsuphasawat, et al. IEEE Trans. Visualization & Computer Graphics (InfoVis) 2015. ★ **1 of 4 Top TVCG papers invited to SIGGRAPH'16**

Vega-Lite: A Grammar of Interactive Graphics

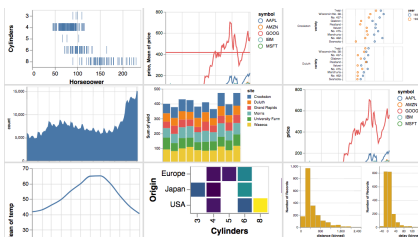
A. Satyanarayan, D. Moritz, K. Wongsuphasawat, J. Heer. IEEE Trans. Visualization & Computer Graphics (InfoVis) 2016. ★ **Best Paper (Top 1)**

Visualizing Dataflow Graphs of Deep Learning Models in TensorFlow

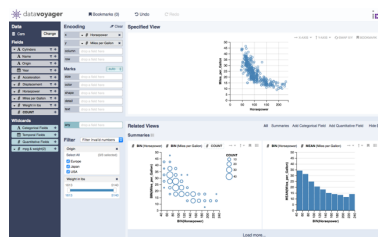
K. Wongsuphasawat, et al. IEEE Trans. Visualization & Computer Graphics (VAST) 2017. ★ **Best Paper (Top 1)**

SKILLS

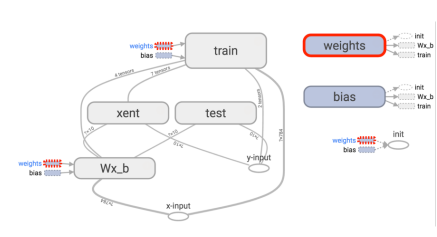
Coding: (*Proficient*) JavaScript/TypeScript, HTML/CSS, d3.js, React (*Knowledgeable*) Python, Java; Data Science: Tableau, Machine Learning User-Centered Design: Experimental Design, Qualitative Interview; Creative Authoring: Sketch, Keynote, OmniGraffle, Illustrator



Vega-Lite: Grammar of Interactive Graphics
<http://vega.github.io/vega-lite>



Voyager: Intelligent Visualization Tool
<http://github.com/vega/voyager>



TensorFlow Graph Visualizer
<http://idl.cs.washington.edu/papers/tfgraph>

