Vijay Keswani

New Haven, Connecticut 06511
✆ (475)-655-8485
✉ vijay.keswani@yale.edu

Education

2019	**Ph.D. candidate, Statistics and Data Science**, *Yale University, U.S.*
2017-2019	**Computer Science**, *EPFL, Lausanne, Switzerland.*
2015-2016	**Master in Technology**, *Computer Science and Engineering, IIT Kanpur, India.*
2011-2016	**Bachelor in Technology**, *Computer Science and Engineering, IIT Kanpur, India.*

Experience

Publications

KDD 2021	**Auditing for Diversity using Representative Examples**, *Vijay Keswani, L. Elisa Celis.*
AIES 2021	**Towards Unbiased and Accurate Deferral to Multiple Experts**, *Vijay Keswani, Matthew Lease, Krishnaram Kenthapadi.*
ICML 2021	**Fair Classification with Noisy Protected Attributes: A Framework with Provable Guarantees**, *L. Elisa Celis, Lingxiao Huang, Vijay Keswani, Nisheeth K. Vishnoi.*
KDD 2021	**Auditing for Diversity using Representative Examples**, *Vijay Keswani, L. Elisa Celis.*
The Web Conf. 2021	**Dialect Diversity in Text Summarization on Twitter**, *Vijay Keswani, L. Elisa Celis.*
CSCW 2020	**Implicit Diversity in Image Summarization**, *L. Elisa Celis, Vijay Keswani.*
ICML 2020	**Data preprocessing to mitigate bias: A maximum entropy based approach**, *L. Elisa Celis, Vijay Keswani, Nisheeth K. Vishnoi.*
FAT* 2019	**Classification with Fairness Constraints: A Meta-Algorithm with Provable Guarantees**, *L. Elisa Celis, Lingxiao Huang, Vijay Keswani and Nisheeth K. Vishnoi.*
ICML 2018	**Fair and Diverse DPP-based Data Summarization**, *L. Elisa Celis, Vijay Keswani, Damian Straszak, Amit Deshpande, Tarun Kathuria, Nisheeth K. Vishnoi.*
IJCAI-ECAI 2018	**Balanced News Using Constrained Bandit-based Personalization**, *Sayash Kapoor, Vijay Keswani, Nisheeth K. Vishnoi, L. Elisa Celis.*

Internships

Summer, 2014	**Validation of a Compiler for Critical Embedded Software**, *w/ Francesco Zappa Nardelli and Mark Pouzet*, INRIA, Paris-Rocquencourtand ENS, Paris.
	Worked on the verification of a data synchronous language, called *Lustre*, by building a symbolic validation framework in OCaml. The verification framework generated the symbolic representation for Lustre programs and the resulting C programs, which were then compared using Z3 SMT solvers to authenticate their equivalence.
2013	**Study of Statistical Learning Algorithms**, *w/ Ambedkar Dukkipatti*, CSA Department, Indian Institute of Science, Bangalore.
	Applied information theoretic concepts suggested by Kamal Nigam and Andrew McCallum, to get a better model for document classification.

Industry Experience

2016-2017 **Product Engineer**, *Sprinklr*, Gurgaon, India.
Sprinklr aimed to provide a single platform for social media management to enterprises. As part of the Advertisements team, we worked to ensure that our platform is always compatible with the current APIs of all relevant social networks, such as Facebook, Snapchat, etc. We also provided several novel analysis tools to the users to judge the performance of their ads and to maximize their returns from these ads.

Teaching Experience

2021 **Data Science Ethics**, *Teaching Assistant*, Yale University.

2020 —, *Yale University*, EPFL.

2018 **Theory of Computation**, *Teaching Assistant*, EPFL.

2016 **Algorithms and Data Structures**, *Instructor*, ACA Summer School, IITKanpur.

2016 **Online Learning and Optimization**, *Teaching Assistant*, IIT Kanpur.

2015 **Theory of Computation**, *Teaching Assistant*, IIT Kanpur.

2015 **Data Structures and Algorithms**, *Teaching Assistant*, IIT Kanpur.

2014 **Data Structures and Algorithms**, *Teaching Assistant*, IIT Kanpur.

Skills

Softwares: MATLAB, Excel/Office, STWAVE (modelling) PTC Creo (Limited), Python (Limited)

Equipment/Hardware Skills

Wave Tank: Hydraulic Wavemaker, Load cell, Wave-guage operation

Flow Map: Flow Tank, Dye pumps (visualization), Class IV Laser operation

Acoustics: Oscilloscope, Function Generator, Humminbird 1158c Transducer