Forrest (Zifeng) Huang

Curriculum Vitae

354 Hearst Memorial Mining Building
University of California, Berkeley
Berkeley, CA 94720
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Education

2017–present **Ph.D. Computer Science (In Progress)**, *University of California, Berkeley*, *GPA: 4.00/4.00*.
Advisor: Prof. John F. Canny

2013–2017 **B.S. Computer Science with Highest Honors**, *University of Illinois at Urbana-Champaign*,
GPA: 3.97/4.00.
Bronze Tablet Scholar: Among top 3 percent of the students in their college graduating class.
Bachelor Thesis Advisor: Prof. Ranjitha Kumar

Publications

Peer-reviewed Conference Publications

2019 **Scones: Towards Conversational Authoring of Sketches**,
Forrest Huang, *Eldon Schoop, David Ha and John F. Canny*,
Accepted to the 25th ACM International Conference on Intelligent User Interfaces (IUI '20).

2019 **Sketchforme: Composing Sketched Scenes from Text Descriptions for Interactive Applications**,
Forrest Huang *and John F. Canny*,
Proceedings of the 32nd Annual Symposium on User Interface Software and Technology (UIST '19), `https://dl.acm.org/citation.cfm?id=3347878`.

2019 **Swire: Sketch-based User Interface Retrieval**,
Forrest Huang, *John F. Canny and Jeffrey Nichols*,
Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19), `https://dl.acm.org/citation.cfm?id=3300334`.

2018 **t-SNE-CUDA: GPU-Accelerated t-SNE and its Applications to Modern Data *Outstanding Paper Award***,
David M. Chan, Roshan Rao*,* ***Forrest Huang**** *and John F. Canny*,
Proceedings of the 2018 High Performance Machine Learning Workshop (HPML '18) , `https://arxiv.org/abs/1807.11824`.

* equal contribution

2018 **MakerLens: What Sign-In, Reservation and Training Data Can (and Cannot) Tell You About Your Makerspace**,
*Eldon Schoop, **Forrest Huang**, Nathan Khuu and Björn Hartmann*,
Proceedings of the 2018 International Symposium on Academic Makerspaces (ISAM '18).

2017 **ZIPT: Zero-Integration Performance Testing of Mobile App Design**,
*Biplab Deka, **Zifeng Huang**, Chad Franzen, Jeffrey Nichols, Yang Li and Ranjitha Kumar*,
Proceedings of the 30th Annual Symposium on User Interface Software and Technology (UIST '17), `https://dl.acm.org/citation.cfm?id=3126647`.

2017 **Rico: A Mobile App Dataset for Building Data-Driven Design Applications**,
*Biplab Deka, **Zifeng Huang**, Chad Franzen, Joshua Hibschman, Daniel Afergan, Yang Li, Jeffrey Nichols and Ranjitha Kumar*,
Proceedings of the 30th Annual Symposium on User Interface Software and Technology (UIST '17), `https://dl.acm.org/citation.cfm?id=3126594.3126651`.

2016 **ERICA: Interaction Mining Mobile Apps**,
*Biplab Deka, **Zifeng Huang** and Ranjitha Kumar*,
Proceedings of the 29th Annual Symposium on User Interface Software and Technology (UIST '16), `https://dl.acm.org/citation.cfm?id=2984581`.

2015 **Ranking Designs and Users in Online Social Networks**,
*Biplab Deka, Haizi Yu, Devin Ho, **Zifeng Huang**, Jerry O. Talton and Ranjitha Kumar*,
Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '15), `https://dl.acm.org/citation.cfm?id=2702613.2732760`.

Journal Publications

2019 **GPU accelerated t-distributed stochastic neighbor embedding**,
David M. Chan, Roshan Rao*, **Forrest Huang*** and John F. Canny*,
Journal of Parallel and Distributed Computing (JPDC), `https://doi.org/10.1016/j.jpdc.2019.04.008`.

Demo

2016 **ERICA: Interaction Mining for Mobile Applications**,
*Biplab Deka, **Zifeng Huang** and Ranjitha Kumar*,
Demo at the 29th Annual Symposium on User Interface Software and Technology (UIST '16).

Bachelor Thesis

title *Efficient Capturing of User-Interface Data on Android Apps*

supervisor Prof. Ranjitha Kumar

description This thesis presents a system for capturing customized user interface data efficiently from Android apps. The system consists of a modified Android build and several third-party frameworks to capture screenshot, user interaction and view hierarchy efficiently from Android devices. The system is an integral part of various interaction mining systems.

Professional Activities

2019 **Reviewer for CHI 2020**

2017 **Reviewer for CHI 2018**

Employment

2018 **Student Researcher**, *Google LLC*,
Mountain View, CA.
Student Researcher under Research Scientist Jeffery Nichols

2018 **Software Engineering Intern**, *Google LLC*,
Mountain View, CA.
Software Engineering Intern under Research Scientist Jeffery Nichols

2017-present **Graduate Student Researcher**, *University of California, Berkeley*,
Berkeley, CA.
Graduate Student Researcher of Professor John Canny's Research Group

2015-2017 **Undergraduate Research Assistant**, *University of Illinois at Urbana-Champaign*,
Champaign, IL.
Research Assistant of Professor Ranjitha Kumar's Data-driven Design Group

2015 **Android Software Engineering Intern**, *The Climate Corporation*,
San Francisco, CA.

Scholarships, Honors, Grants and Awards

2020 **Honourable Mention, Adobe Research Fellowship**

2019 **Google Cloud Platform Credit Award** *on research with David Ha, Research Scientist at Google Brain*

2017 **C.W. Gear Outstanding Undergraduate Researcher Award**

2016-2017 **Maxine and Yunni Pao Memorial Scholarship**

2014-2015 **Dean's List, University of Illinois at Urbana-Champaign**

Teaching

2019 **Graduate Student Instructor for CS160 User Interface Design and Development**, *University of California, Berkeley*.

2019 **Graduate Student Instructor for CS182 Designing, Visualizing and Understanding Deep Neural Networks**, *University of California, Berkeley*.

2017 **Grader for CS446 Machine Learning**, *University of Illinois at Urbana-Champaign*.

2014-2015 **Course Assistant for CS125 Introduction to Computer Science**,
University of Illinois at Urbana-Champaign.

Leadership

2015 **President** *Promoting Undergraduate Research in Engineering Committee at University of Illinois at Urbana-Champaign*