

Jia-Kai CHOU, Ph.D.

Post-doctoral Researcher, Dept. of Computer Science, University of California-Davis

<https://jjkai.github.io>
<https://www.linkedin.com/in/jjkai/>

+1 626-566-5381
jiakai.chou@gmail.com

SUMMARY

I am a computer scientist who designs data visualizations and interactive systems to perform effective data analytics. I work closely with domain experts in various fields, to identify their needs and develop prototypes. The systems that I built allow them to derive new insights from data more efficiently and to convey their findings with others more easily. I am looking for opportunities to employ my knowledge in user-centered design to enable industry practitioners to find better ways to understand and communicate with their data.

COMPUTER SCIENCE SKILLS

UX: Design of Experiment, Quantitative analysis, Qualitative analysis, Survey/Questionnaire design

Web: Javascript, Node.js, Express.js, D3.js, CSS

Programming: Python, Matlab, C/C++, OpenGL, Qt, Git

Data Analysis: Python (Pandas, NumPy, scikit-learn), TensorFlow, R, SQL

EMPLOYMENT & EXPERIENCE

Post-Doctoral Researcher, Dept. of CS, University of California, Davis Jan. 2015
Supervised more than 10 student researchers and published more than 10 papers. Conduct research - Present
in various topics spanning the fields of information visualization and visual analytics:

- Introduced novel visualization techniques for performing event sequence analysis.
- Developed visual interfaces that allow for identifying, reviewing, and addressing privacy concerns in different types of data, such as event sequence, social network, and tabular data.
- Incorporated data mining and statistical algorithms to interactive systems for enabling domain experts, such as neuroscientists and clinicians, analyze their data at scale.
- Conducted quantitative and qualitative user studies to evaluate and verify research hypotheses.

Assistant IT Coordinator, Dept. of IT, Taipei City Government, Taiwan Oct. 2013
Coordinated with FISU's IT&C consultant for planning a \$1-billion NTD budget on IT&C equipment - Nov. 2014
and software systems for 2017 Taipei Universiade.

Visiting Student, Dept. of CS, University of California, Davis Feb. 2012
Augmented text-to-speech audios to an timeline-based visualization and tested it effectiveness. - Oct. 2012

Summer Intern, Trend Micro, Inc., Taipei, Taiwan Summer 2010
Integrated multiple visualization toolkits for network user behavior analysis.

Graduate Student Researcher, Dept. of Information Management, Sep. 2007
National Taiwan University of Science and Technology - Jul. 2013

Implemented algorithms and systems for multimedia applications:

- Interactive systems for simulating facial features and hairstyle swapping in images.
- Privacy aware image, video, and volumetric data storage and processing.
- Visual analysis of time-varying social network data.

EDUCATION

Ph.D., Information Management | Advisor: Prof. Chuan-Kai Yang Jul. 2013
National Taiwan University of Science and Technology Dissertation: Privacy Preserving Multimedia Data Processing

M.S., Information Management | Advisor: Prof. Chuan-Kai Yang Jul. 2009
National Taiwan University of Science and Technology Thesis: Virtual Haircut and Hairstyle Cloning

HONORS & AWARDS

Winner of PacificVis 2017 Visual Storytelling Contest

Best Paper Honorable Mention Award, Siggraph Asia 2016 Symposium on Visualization

Winner of Originality in IEEE 2015 VGTC VPG International Data-Visualization Contest

PUBLICATIONS

I have authored and co-authored more than 15 papers related to topics of information visualization, human computer interaction, and multimedia systems. Titles and their summaries are available upon request.