# **Gromit Yeuk-Yin CHAN**

A08-429, 345 Park Avenue, San Jose, CA 95110

Email: gromit.chan@google.com · Website: www.gromitchan.com · Google Scholar: t7tR7O0AAAAJ

# RESEARCH INTEREST

Visualization, Data Management, Human Computer Interaction

# **EDUCATION**

2016 - 2021 New York University

Ph.D in Computer Science

Advisors: Cláudio T. Silva, Juliana Freire

Committee: Enrico Bertini, Luis Gustavo Nonato, Arvind Satyanarayan

2012 - 2016 The Hong Kong University of Science and Technology

BEng in Computer Engineering and BBA in General Business Management

Advisor: Huamin Qu

2005 - 2012 Queen's College, Hong Kong

Hong Kong Advanced Level Examination: Distinction in Physics

# PROFESSIONAL EXPERIENCE

2021 July - Now	Research Scientist, Adobe Research, San Jose, CA
2020 May - Aug	Research Intern, Adobe Research, San Jose, CA
2019 Jun - Sep	Research Intern, Adobe Research, San Jose, CA
2019 Feb - Apr	Visiting Scholar, diNo Research Group (Paris Descartes University), Paris, France
2017 Jun- Sep	Research Intern, Bosch Research, Palo Alto, CA
2016 Aug - 2021 July	Research Assistant, NYU VIDA (Visualization, Imaging, and Data Analytics Center), Brooklyn, NY
2015 Jun - 2016 Aug	Undergraduate Researcher, HKUST VisLab, Hong Kong
2015 Jan - May	IT Consulting Intern, IBM Global Business Services, Hong Kong
2014 Jun - Aug	Software Engineering Intern, Orient Overseas Container Line (OOCL), Hong Kong
2013 Sep - Dec	Design Consulting Intern, <b>Harman Kardon</b> , Hong Kong
2013 Jun - July	Logistics Intern, <b>GE Healthcare</b> , Beijing, China

# **PUBLICATIONS** (★ indicates premier venues )

#### **Conferences and Journals:**

- Gromit Yeuk-Yin Chan, Tung Mai, Anup B Rao, Ryan A Rossi, Fan Du, Cláudio T Silva, and Juliana Freire. Interactive Audience Expansion On Large Scale Online Visitor Data. International Conference on Knowledge Discovery and Data Mining (KDD), 2021 ★
- Gromit Yeuk-Yin Chan, Fan Du, Ryan A Rossi, Anup B Rao, Eunyee Koh, Cláudio T Silva, and Juliana Freire. Real-Time Clustering for Large Sparse Online Visitor Data. The Web Conference (WWW), 2020 (Accepted for Oral Presentation) ★
- 3. Gromit Yeuk-Yin Chan, Luis Gustavo Nonato, Alice Chu, Preeti Raghavan, Viswanath Aluru, and Cláudio T Silva.

  Motion Browser: Visualizing and Understanding Complex Upper Limb Movement Under Obstetrical Brachial Plexus Injuries.

  IEEE transactions on visualization and computer graphics (TVCG), 2020 (Proceedings of VIS 2019) ★

- 4. Gromit Yeuk-Yin Chan, Panpan Xu, Zeng Dai, and Liu Ren.
  - VIBR: Visualizing Bipartite Relations at Scale with the Minimum Description Length Principle. *IEEE transactions on visualization and computer graphics (TVCG)*, 2019 (Proceedings of VIS 2018) ★
- 5. Quan Li, Peng Xu, <u>Yeuk-Yin Chan</u>, Yun Wang, Zhipeng Wang, Huamin Qu, and Xiaojuan Ma. A Visual Analytics Approach for Understanding Reasons behind Snowballing and Comeback in MOBA Games. *IEEE transactions on visualization and computer graphics* (*TVCG*), 2017 (Proceedings of VIS 2016) ★
- 6. Yeuk-Yin Chan and Huamin Qu.

FinaVistory: Using Narrative Visualization to Explain Social and Economic Relationships in Financial News. *International Conference on Big Data and Smart Computing (BigComp)*, 2016

# Workshops, Demos and Posters:

- Yeuk-Yin Chan, Fernando Chirigati, Harish Doraiswamy, Cláudio T Silva, and Juliana Freire.
   Querying and Exploring Polygamous Relationships in Urban Spatio-Temporal Data Sets.
   ACM International Conference on Management of Data (SIGMOD), 2017 (Best Demo Honorable Mention) ★
- 2. Rong Zheng and Yeuk-Yin Chan.
  - You Like What You Hear: Using Movie Content to Improve Movie Recommender Systems. Winter Conference on Business Intelligence, 2016
- 3. Abishek Puri, Dongyu Liu, Shaoyu Chen, Siwei Fu, Tianyu Wang, <u>Yeuk-Yin Chan</u>, and Huamin Qu. ParkVis: A visual analytic system for anomaly detection in DinoFun World. *IEEE VIS Workshop on VAST Challenge*, 2015

# **PATENTS**

- 1. Dynamic Clustering of Sparse Data Utilizing Hash Partitions. Filed in 2020.
- 2. Methods and Systems for Simplified Graphical Depictions of Bipartite Graphs. US Patent 10,650,559, 2020.

### **TEACHING**

2020 Spring CS-GY 9223 Visualization for Machine Learning (15 students)

2020 Spring CS-GY 9223 Visualization: Connections with Machine Learning (23 students)

2018 Fall CS-GY 6313 Information Visualization (46 students)

2016 Fall CS-UY 1134 Data Structures and Algorithms (51 students)

# PROFESSIONAL SERVICES

#### **Program Committee:**

• WWW: 2022

#### Reviewer:

• ACM CHI: 2021, 2022

• IEEE VIS (InfoVis and VAST): 2019, 2020

• WWW: 2020

• EuroVis: 2017, 2019, 2020

PacificVis: 2020IEEE CG&AIEEE TVCG

# PRESENTATION, NEWS AND MEDIA COVERAGE

2021 Data Summaries for Scalable Visual Analysis

Dataminr, New York

2021 Data Summaries for Scalable Visual Analysis

Megagon Labs, Mountain View

2020 Data Summaries for Scalable Visual Analysis

Adobe Research, San Jose

2020	Real-Time Clustering for Large Sparse Online Visitor Data
	The Web Conference, Taipei
2019	Visualizing and Understanding Complex Upper Limb Movement Under Obstetrical Brachial Plexus Injuries
	IEEE VIS, Vancouver
2018	Visualizing Bipartite Relations at Scale with the Minimum Description Length Principle
	AT&T Graduate Student Symposium, New York City
2018	Visualizing Bipartite Relations at Scale with the Minimum Description Length Principle
	IEEE VIS, Berlin
2016	Student Hackers Team Up with Manhattan DA to Fight Human Trafficking
2016	科網雲圖: 財經新聞大數據 (in Chinese)
2016	科大生研大數據 獲邀海外演講 (in Chinese)

# AWARDS/HONORS/CERTIFICATIONS

2018	VIS Student Volunteer
2017	SIGMOD Student Travel Grant
2016	NYU School of Engineering Fellowship
2016	Bronze Prize of ASM Technology Award
2016	Mr Armin and Mrs Lillian Kitchell Undergraduate Research Award
2016	Technology and Management Elite Student Scholarship
2015	Honorable Mention, IEEE VAST (Visual Analytics Science and Technology) Challenge 2015
2013	HKSAR Government Scholarship Fund - Reaching Out Award
2012	University Entrance Scholarship, HKUST
2012	Morrison Distinction Price, Queen's College

# **PERSONAL**

Computer Skills (that I used often):

- Web Interactive Prototyping: Javascript, Flask
- Geometric Modeling and Computer Graphics: OpenGL, Eigen, libigl, d3.js
- Big Data Computing: MapReduce, Spark, MLlib, Numpy, c++, Matlab

Language: English (professional) (IELTS 8.0), Cantonese (native), Mandarin (native)

Hobbies: Piano (ABRSM Grade 8), Driving, Cycling, Travelling