Gromit Yeuk-Yin CHAN

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

Email: gromit.y.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, **Harman Kardon**, Hong Kong
2013 Jun - July	Logistics Intern, **GE Healthcare**, Beijing, China

PUBLICATIONS (★ indicates premier venues)

Conferences and Journals:

1. Jun Yuan, <u>Gromit Yeuk-Yin Chan</u>, Brian Barr, Kyle Overton, Kim Rees, Luis Gustavo Nonato, Enrico Bertini, and Claudio T Silva. SUBPLEX: A Visual Analytics Approach to Understand Local Model Explanations At the Subpopulation Level. *IEEE Computer Graphics and Applications (**CG&A**)*, 2022

2. <u>Gromit Yeuk-Yin Chan</u>, 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 ★

3. <u>Gromit Yeuk-Yin Chan</u>, 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**) ★

4. <u>Gromit Yeuk-Yin Chan</u>, 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) ★

5. <u>Gromit Yeuk-Yin Chan</u>, 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) ★

6. 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) ★

7. <u>Yeuk-Yin Chan</u> 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:

1. <u>Gromit Yeuk-Yin Chan</u>, Shunan Guo, Caroline Kim, Cole Connelly, Michelle Lee, Andrew Thomson, and Eunyee Koh.
Detecting Email Components with Constraints: Expressive and Extensible Models in Answer Set Programming.
Conference on Human Factors in Computing Systems (Late Breaking Work) (CHI LBW), 2023 ★

2. Shubham Agarwal, <u>Gromit Yeuk-Yin Chan</u>, Shaddy Garg, Tong Yu, and Subrata Mitra.
Fast Natural Language Based Data Exploration with Samples.
*ACM International Conference on Management of Data (**SIGMOD**)*, 2023 ★

3. Peter Xenopoulos, <u>Gromit Chan</u>, Harish Doraiswamy, Luis Gustavo Nonato, Brian Barr, and Claudio Silva.
GALE: Globally Assessing Local Explanations.
ICML Workshop on Topology, Algebra, and Geometry in Machine Learning, 2022 (**Spotlight**) ★

4. <u>Yeuk-Yin Chan</u>, 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**) ★

5. Rong Zheng and <u>Yeuk-Yin Chan</u>.
You Like What You Hear: Using Movie Content to Improve Movie Recommender Systems.
Winter Conference on Business Intelligence, 2016

6. 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. Trait Expansion Techniques in Binary Matrix Datasets. Filed 2022.

2. Segmenting users with sparse data utilizing hash partitions. US Patent App. 17/660,328.

3. 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)

MENTORING (only includes students I directly supervise)

2023	Tongyu Zhou (Brown); Zhihua Jin (HKUST)
2022	Huayi Wang (Gatech) - ML Query Acceleration
2021	Pat Sukprasert (Northwestern) - Dataset Discovery

PROFESSIONAL SERVICES

Program Committee:

• WWW (2022, 2023), WSDM (2022), CIKM (2022)

Reviewer:

• ACM CHI (2021, 2022), IEEE VIS (2019, 2020, 2021), WWW (2020), EuroVis (2017, 2019, 2020), PacificVis (2020), IEEE CG&A, IEEE TVCG

PRESENTATION, NEWS AND MEDIA COVERAGE

2022	*Project Style Blast*
	Adobe Summit Sneaks
2021	*Interactive Audience Expansion On Large Scale Online Visitor Data*
	KDD, Singapore
2020-21	*Data Summaries for Scalable Visual Analysis*
	Dataminr, New York; Megagon Labs, Mountain View; 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; 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