Yutian Tang

Curriculum Vitae

Education

- 2013–2017 **Ph.D.**, *The Hong Kong Polytechnic University*, Hong Kong. Department of Computing
- 2009–2013 **Bachelor**, *Jilin University*, Changchun, P.R.China. Department of Computer Science and Technology

Working Experience

2017–Current **Research Associate**, *Department of Computing*, The Hong Kong Polytechnic University.

Involve in RGC project with Hong Kong Government.

- Implements a crawler tool named inappcrawler for Google Play with Scrapy framework;
- Project Demo and Output: http://www.chrisyttang.org/android-instant-app/ index.html;
- 2014–2015 **Part-time Student Helper**, *Educational Development Centre*, The Hong Kong Polytechnic University.
 - Enrol in course team for designing course material and present those online;
 - Develop the front-end webpage for the department;
 - Skill-set: HTML, CSS, JS, JQuery, Android, Java backend;
 - Tools: Android Studio, Dreamweaver;
 - Ability: Programming, problem solving, team work;

Publications

- 2017 **Yutian Tang**, Hareton Leung, "StiCProb: A Novel Feature Mining Approach Using Conditional Probability", *In Proceedings of 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)* pp 45-55.
- 2017 **Yutian Tang**, Hareton Leung, "Constructing Feature Model by Identifying Variability-aware Modules", *In Proceedings of 25th IEEE International Conference on Program Comprehension (ICPC)* pp 263-274.
- 2015 **Yutian Tang**, Hareton Leung, "Top-down Feature Mining Framework for Software Product Line", *In Proceedings of International Conference on Enterprise Information System (ICEIS)* pp 71-81.

Professional Qualifications & Membership

- 2017 Member of ISACA
- 2017 Student Member of IEEE

- 2017 Student Member of Hong Kong Computer Society
- 2012 Intermediate Title of So ware Engineer (China Qualification Certificate of Computer Science Technology Proficiency)

Projects and Tools

2017-curr AndroidInstantApp.

- Hong Kong SAR government project under RGC entitled "Improving Mobile Users' Privacy Decisions via Exposing Unexpected Sensitive Operations in Hardened Apps";
- Implement a crawler tool for scanning and downloading Instant App from Google Play with Scrapy framework and SQLite DB;
- Skillset: Scrapy, SQLite, Python;

2016-2017 **TypeC**, Eclipse plugin toolkit for conditional compilation with CDT.

- Rewrite the CDT parser for processing all possible configuration options with a single scanning;
- Implement the analysis framework for understanding configuration and find valid configuration with a single iteration;
- Skillset: Java, Eclipse CDT, plugin, C;
- OURL:http://www.chrisyttang.org/typec/

2016-2017 **LoongFMR**, Eclipse plugin toolkit for product line architecture understanding with *JDT*.

- Implement the main framework, comparison approaches using graph optimisation, NLP, and static analysis;
- Except the static analysis, architectures are extracted and presented;
- Skillset: Java, Eclipse JDT, plugin;
- OURL:http://www.chrisyttang.org/loong_fmr/

2015-2016 **Loong**, Eclipse plugin toolkit for product line understanding with JDT.

- Implement the main framework and details for product line analysis;
- Implement static analysis, including build the program database(AST based), control flow, data flow, points-to analysis;
- Data extraction and analysis with R;
- Skillset: Java, Eclipse JDT, plugin;
- OURL:http://www.chrisyttang.org/loong/

2015-2016 Course project, P2P data sharing toolkit on Android.

- A course project, which aims at implementing a p2p data sharing;
- Enable p2p chat, audio/video transformation/sharing over XMPP and SIP;
- Skillset: Android, Socket;
- o Implement the data sharing module for text, video, and audio;

Skills

- OO Programming: Java, Python, C++, Android;
- Web: HTML, CSS, JS, JQuery, Java, Php;
- DB: MySQL, MongoDB;
- Tool & Framework: Eclipse (JDT, CDT), Soot, Boot, Eclipse plugin, Matlab;

Teaching

- 2016— **COMP3235**, *Software Project Management*, PolyU-Bachelor Degree Course, De-2017(1) partment of Computing.
- 2016- COMP3233, Software Testing and Quality Assurance, PolyU-Bachelor Degree
- 2017(2) Course, Department of Computing.
- 2015-2016(1) **COMP4911**, Capstone Project, PolyU-Bachelor Degree Course, Department of Computing.
- 2015-2016(2) **COMP3211**, *Software Engineering*, PolyU-Bachelor Degree Course, Department of Computing.
 - 2014-2015 **COMP3235**, *Software Project Management*, PolyU-Bachelor Degree Course, Department of Computing.
- 2013-2014(1) **COMP309**, *System Programming*, PolyU-Bachelor Degree Course, Department of Computing.
- 2013-2014(2) **COMP322**, Enterprise Information Systems Project Implementation, PolyU-Bachelor Degree Course, Department of Computing.

References

- Dr. Hareton Leung, Associate Professor, Supervisor, cshleung@comp.polyu.edu.hk;
- Dr. Daniel Xiapu Luo, Research Assistant Professor, Supervisor, Iuoxiapu@gmail.com;
- Dr. Ting Chen, Associate Professor, Cooperator, brokendragon@uestc.edu.cn;