

Jasmine “Inishan” Chen

Dedicated, experienced and proficient CS student with hands-on experience working with production-scale datasets and services in notable firms. Led teams and won numerous awards in programming competitions.

Career Summary

- **Software Engineering Intern at Google USA.**
 - Expanded a large-scale testing framework used by Google YouTube and Search Infrastructure developers.
 - **R&D Intern at Synopsys Taiwan.**
 - Designed, implemented and analyzed graph algorithms on production-scale datasets.
 - Rated Best Intern of the Year and presented the work in Synopsys Shanghai.
 - **3 years** of experiences in **gaming industries.**
 - Wrote keyboard lighting effects, implemented website designs, managed servers and coordinated multiple events.
 - Been a **competitive programmer** for **11 years**, usually as the team leader.
 - Received 21 national/regional awards in programming competitions.
 - Curated a well-received learning resource collection: "Awesome Competitive Programming" (1,800+ stars, 400+ forks on GitHub).
 - Created, administered and managed multiple websites with decent web traffic.
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Contact

Languages: **English** (fluent with neutral accent, TOEIC 940/990), **Chinese** (native)

- Email: jasmine.chen.cs@gmail.com
- [GitHub @Inishan \(https://github.com/Inishan\)](https://github.com/Inishan)
- [LinkedIn @Inishantw \(https://www.linkedin.com/in/Inishantw\)](https://www.linkedin.com/in/Inishantw)
- [Twitter @Inishantw \(https://twitter.com/Inishantw\)](https://twitter.com/Inishantw)

Education

- **National Chiao Tung University**
Bachelor's Degree, **Computer Science and Engineering** (Sep 2014 – Jan 2018), Management Science (Sep 2012 – Jun 2014)
 - **GPA: 4.00/4.30 (Rank: 1/53)**

- Bachelor's Thesis: [SQLGitHub \(Python, 2017\) \(https://github.com/lnishan/SQLGitHub\)](https://github.com/lnishan/SQLGitHub), a tool that makes managing GitHub organizations easier. Features a SQL-like syntax to query through GitHub API. In collaboration with **Mozilla Taiwan**.
- 5 *Academic Achievement Awards* (4 in Computer Science)
- 2 *Curricular Scholarships* (Discrete Mathematics, Data Structures)
- Teaching Assistant, *Object-Oriented Programming*
- Relevant Coursework: Data Structures, Algorithms, Artificial Intelligence, Discrete Mathematics, Probabilities, Operating Systems, Computer Organization, Computer Networks, Computer Graphics, Computer Security, Database Systems, System/Network Administration Practice, Parallel Programming, Human Computer Interaction

Skills

- Areas: Algorithms, Data Structures, Backend Development, Software Engineering, Parallel Computing, Web Development, System Administration
- Languages: C++, C, Python, Bash, (HTML, CSS, JavaScript, PHP, MySQL)
- OSes: Windows (Cygwin), macOS, Linux, FreeBSD

Experiences

- **Google** ... Cambridge, MA, USA Jun 2017 – Sep 2017
Software Engineering Intern
 - Python, Software Testing, Infrastructures
 - Expanded a large-scale integration testing framework used across services at Google (including YouTube Infrastructures and Search Infrastructures) to support iterative development with a new build tool.
 - The tool monitors local code changes and automatically recompiles, redeploys, and retests services as edits are made.
 - Shortened workflow of iterative testing by 1 – 8 minutes (or 10 - 20x) on each retest.
 - Worked with YouTube Live developers to gather feedback for my work.
- **Synopsys** ... Taipei, Taiwan Jul 2016 – Aug 2016
R&D Intern
 - C/C++, Algorithms, Shell Scripting, Graph Visualization, Memory Profiling
 - Rated Best Intern of the Year and presented the work in Synopsys Shanghai.
 - Designed and implemented an innovative graph algorithm which speeded up Nodal Analysis by 120% and reduced its memory usage by 47%.
 - Utilized a wide assortment of tools and libraries for graph visualization, debugging, validation, profiling, data analytics and documentations.
 - Wrote a Valgrind extension and several shell scripts for automated testing and profiling.
- **ITSA E-tutor** ... Work from home Apr 2016 – Dec 2016
Problem Reviewer
 - Algorithms, Discrete Mathematics
 - Reviewed 120 algorithmic problems on ITSA E-tutor (<http://e-tutor.itsa.org.tw>), an online learning platform initiated by the Ministry of Education in Taiwan.
- **Cooler Master** ... Taipei, Taiwan Apr 2016 – Jun 2016
Independent Contractor
 - C++, Windows API, C++ SDK, Time-Driven Programming
 - Programmed LED lighting effects on MasterKeys Pro (keyboard) with its C++ SDK and Windows API.
 - Attained animations with smooth gradient transitions with advanced time-driven programming.

- **4Gamers** ... Taipei, Taiwan Jan 2014 – Aug 2014
Part-time Internship
 - IT, Web Development
 - General IT Assistance, including setting up PCs and troubleshooting issues.
 - Implemented professional web designs with HTML, CSS and JavaScript.
- **eGamers** ... Work from home Jul 2012 – Dec 2013
Part-time Internship, Community Coordinator
 - IT, Web Development, Community Coordination
 - Worked closely with Twitch celebrity streamers (5,000 - 100,000 followers).
 - General IT Assistance, including setting up PCs and troubleshooting issues.
 - Wrote a simple form management system for hosting tournaments and a couple handy tools for news publishing with HTML, CSS, JavaScript, PHP and MySQL.
- **i-Feels.net** ... Hong Kong / Work from home Apr 2006 – Feb 2008
Cofounder, Administrator, Developer
 - Visual Basic, PHP, MySQL, Website Management
 - Cofounded i-Feels.net and its predecessor ODB - a small development studio with friends from Hong Kong.
 - i-Feels.net was one of the most popular forums in Hong Kong, having 60,000+ registered members and being amongst the top 500 websites in Hong Kong according to Alexa Traffic Rank.
 - Administered a number of other websites and forums with moderate web traffic during that period of time.
 - More information can be found on this [Wiki page \(http://evchk.wikia.com/wiki/I-Feels.net\)](http://evchk.wikia.com/wiki/I-Feels.net).

Honors

Academic Performances

- **Academic Achievement Award**
Top 5% in class in terms of overall grades
 - 2016 Spring, 2015 Fall, 2015 Spring, 2014 Fall, 2014 Spring
- **Curricular Scholarship**
Top 5% in class for the “Core Subjects” designated by the department
 - Discrete Mathematics, Data Structures

Problem Solving (Algorithms & Data Structures)

Been the **team leader** and **main coder** in all the following contests:

- **ACM-ICPC (International Collegiate Programming Contest)**
 - *Honorable Mention* - 2015/Taipei
 - *Honorable Mention* - 2015/Hanoi
 - *Honorable Mention* - 2012/Kaohsiung
- **National Collegiate Programming Contest**
 - *3rd Place* - 2015
 - *Honorable Mention* - 2012
- **ITSA National Programming Contest**
 - *Honorable Mention* - 2015
 - *11th Place* - 2014
- **National Problem Solving Contest**
 - *Finalist* - 2011 (15th Place)

- *Finalist - 2010 (9th Place)*
- *5th Place - 2008*
- *4th Place - 2007*
- **Taipei Software Programming Contest**
 - *3rd Place - 2011*
 - *Honorable Mention - 2009*
- **Taipei Information Proficiency Competition**
 - *3rd Prize - 2011*
 - *3rd Prize - 2010*
 - *Honorable Mention - 2009*

Web Development (HTML/CSS/JavaScript/PHP/MySQL)

- **National Collegiate Programming Contest - Application Software**
 - *3rd Place - 2015*
 - *Honorable Mention - 2014*
- **Taiwan School Cyberfair**
 - *Bronze (3rd Place) - 2010*

GUI (Visual Basic)

- **Information Technology Month - Creative Software Programming Contest**
 - *4th Place - 2010/National/Individual*
 - *4th Place - 2009/National/Team*
 - *4th Place - 2009/Northern Region/Individual*

Projects

- [Awesome Competitive Programming \(Markdown, 2016\) \(https://github.com/lnishan/awesome-competitive-programming\)](https://github.com/lnishan/awesome-competitive-programming)
 - Markdown, Algorithms, Data Structures
 - A curated list of awesome resources for Competitive Programming, Algorithms and Data Structures. Currently starred by 1,800+ and forked by 400+ GitHub users worldwide. This project was aimed to connect the world to information - and it did :) .
- [lni::vector \(C++, 2016\) \(https://github.com/lnishan/vector\)](https://github.com/lnishan/vector)
 - C++, Data Structures
 - An optimized, almost-C++17-compliant std::vector implementation. Up-to-149% more efficient than counterparts when tested on gcc 6, clang 3.8 and VS14. Found a mistake in Facebook's folly::fbvector.
- [massif-cherrypick \(C++, 2016\) \(https://github.com/lnishan/massif-cherrypick\)](https://github.com/lnishan/massif-cherrypick)
 - C++, Memory Profiling
 - A Valgrind extension to analyze partial memory consumptions. Given a massif.out file as input, generates a new one with only stats of matched functions.
- [ChiChew \(Python, 2016\) \(https://github.com/lnishan/ChiChew\)](https://github.com/lnishan/ChiChew)
 - Python, Web Scraping, Packet Inspection
 - A web crawler for the Chinese-Chinese dictionary published by the Ministry of Education in Taiwan. Observed HTTP requests, inspected packets and came up with a neat approach to crawl the data.
- [Parallel Video Processing \(C++, 2015\) \(https://github.com/sunset1995/parallel_analysis\)](https://github.com/sunset1995/parallel_analysis)

- C++, Parallel Programming, Video Processing
- A 3-person course project on parallelizing video processing. Utilized various parallel APIs - C++11 thread, Pthread, OpenMP, CUDA and FPGA on Windows, Linux and OSX. Achieved great results.
- [Twitch Plays Connect6 \(C++, 2014\) \(https://github.com/lnishan/TwitchPlaysConnect6\)](https://github.com/lnishan/TwitchPlaysConnect6)
 - C++, Multithreaded Programming, Network Programming, Artificial Intelligence
 - A crowdsourced Connect6 game hosted on TwitchTV. Designed a multi-threaded interaction framework built on top of OpenCV, adapted an open-source IRC client and wrote a simple Connect6 AI.
- [FormMgr \(Web, 2013\) \(http://lnishan.net/FormMgr/\)](http://lnishan.net/FormMgr/)
 - HTML5, JavaScript, PHP, MySQL, Web Development
 - A simple and easy-to-use form management system for organizations. Allows users to validate fields with custom regular expressions. Utilized HTML5 native drag-and-drop and JavaScript for extensive DOM manipulations.

Talks

- CDC Performance Improvement: Trimming Resistance Network, InnoDay, Synopsys Shanghai, Nov 14, 2016
- Profiling & Graph Visualization, Synopsys Taiwan, Aug 17, 2016
- [State Space Search \(http://www.slideshare.net/JasmineChen23/state-space-search-66388212\)](http://www.slideshare.net/JasmineChen23/state-space-search-66388212), NCTU Training Camp, Summer 2015
- [Basic Enumeration \(http://www.slideshare.net/JasmineChen23/basic-enumeration-chinese\)](http://www.slideshare.net/JasmineChen23/basic-enumeration-chinese), NCTU Training Camp, Summer 2015
- [Essential C/C++ \(http://www.slideshare.net/JasmineChen23/essential-cc\)](http://www.slideshare.net/JasmineChen23/essential-cc), NCTU Training Camp, Winter 2015

Trivia

- Used to solve a 3x3 Rubik's Cube in under 18 seconds on average.
- Moderated UniCube.tw - then one of the most popular online forums for Rubik's cubers in Taiwan.
- [Has 500+ games on Steam \(http://steamcommunity.com/id/lnishan\)](http://steamcommunity.com/id/lnishan) through game reselling and trading. Was the first and only person in Taiwan to do so.
- [Had 3000+ followers on TwitchTV \(https://www.twitch.tv/lnishan\)](https://www.twitch.tv/lnishan) being an active supporter of esports and game streaming in general.
- Organized the [very first reddit AMA for TW/HK esports players \(https://www.reddit.com/r/leagueoflegends/comments/13rca6/tpa_toyz_ama_answers_englishtchinese/\)](https://www.reddit.com/r/leagueoflegends/comments/13rca6/tpa_toyz_ama_answers_englishtchinese/).