

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.

Table of Contents

- [Contact](#)
- [Education](#)
- [Skills](#)
- [Experiences](#)
- [Honors](#)
- [Projects](#)
- [Talks](#)
- [Trivia](#)

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>)
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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/Inishan/SQLGitHub) (<https://github.com/Inishan/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 Mangagment**
- 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 :) .

- [Ini::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/).