

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 events.
 - Been a competitive programmer for 11 years, usually as the team leader.
 - Received 20+ national/regional awards in programming competitions.
 - Curated a well-received resource collection: "Awesome Competitive Programming" (1,800+ stars 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)

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- [GitHub @Inishan](#)
- [LinkedIn @Inishantw](#)
- [Twitter @Inishantw](#)

Education

- **National Chiao Tung University**

Bachelor's Degree, **Computer Science and Engineering** (Sep 2014 — Jan 2018), Management Science (Sep 2012 — Jun 2014)

- Bachelor's Thesis: [SQLGitHub \(Python, 2017\)](#), a tool that makes managing GitHub organizations easier. Features a SQL-like syntax to query through GitHub API. In collaboration with *Mozilla Taiwan*.
- **GPA: 4.00/4.30 (Rank: 1/53)**
- 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 , Web (HTML , CSS , JavaScript , PHP , MySQL)
- OSes
 - Windows (Cygwin) , macOS , Linux , FreeBSD

Experience

- **Google**

Software Engineering Intern

Cambridge, MA, USA, Jun 2017 — Sep 2017

- Python , Software Testing , Infrastructures
- Expanded a large-scale integration testing framework used across services at Google, including YouTube and Search Infrastructures, to support iterative development with an extension that 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 Live developers to test and enhance the extension, while improving the quality of existing test cases.

- **Synopsys**

R&D Intern

Taipei, Taiwan, Jul 2016 — Aug 2016

- C/C++ , Algorithms , Shell Scripting , Graph Visualization , Memory Profiling
- Designed, implemented and analyzed an innovative graph algorithm that speeded up Nodal Analysis by 120% and reduced its memory usage by 47% on datasets used in production.
- Performed extensive profiling, data analysis and 3D graph visualization on the effects of the algorithm.
- Wrote a Valgrind extension and several shell scripts for automated testing and profiling.
- Rated Best Intern of The Year and presented the work in Synopsys Shanghai.

- **ITSA E-tutor**

Problem Reviewer

Remote/Tainan, Taiwan, Apr 2016 — Dec 2016

- 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**

Independent Contractor

Taipei, Taiwan, Apr 2016 — Jun 2016

- 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**

Part-time Internship

Taipei, Taiwan, Jan 2014 — Aug 2014

- IT , Web Development
- General IT Assistance, including setting up PCs and troubleshooting issues.
- Implemented professional web designs with HTML, CSS and JavaScript.
- Assisted many Twitch celebrity streamers (5,000 - 100,000 followers) in partnerships, sponsorships, stream moderation and other issues.

- **eGamers**

Part-time Internship, Community Coordinator

Remote, Jul 2012 — Dec 2013

- IT , Web Development , Community Coordination
- 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.
- Assisted many Twitch celebrity streamers (5,000 - 100,000 followers) in partnerships, sponsorships, stream moderation and other issues.

- **i-Feels.net**

Cofounder, Administrator, Developer

Remote/Hong Kong, Apr 2006 — Feb 2008

- 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](#).

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 \(Markdown, 2016\)](#)
 - [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 \(C++, 2016\)](#)
 - [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 \(C++, 2016\)](#)
 - [C++](#) , [Memory Profiling](#)
 - A Valgrind extension to analyze partial memory consumptions. Takes in a massif.out file, and forges a new one containing only stats of the functions that match the specified pattern..
- [ChiChew \(Python, 2016\)](#)
 - [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 \(C++, 2015\)](#)
 - [C++](#) , [Parallel Programming](#) , [Video Processing](#)
 - A group project on parallelizing video processing. Utilized various APIs: C++11 thread, Pthread, OpenMP, CUDA and FPGA on Windows, Linux and OSX. Drawn interesting conclusions.
- [Twitch Plays Connect6 \(C++, 2014\)](#)
 - [C++](#) , [Multithreading](#) , [Network Programming](#) , [Artificial Intelligence](#)
 - A crowdsourced Connect6 game hosted on Twitch. Designed a multi-threaded interaction framework built on OpenCV, adapted an open-source IRC client and wrote a simple Connect6 AI.
- [FormMgr \(Web, 2013\)](#)
 - [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

- Jasmine Chen. *{Name-of-testing-framework} Interactive Edit/Reload*. Google Cambridge. Sep 8, 2017.
- Jasmine Chen. *CDC Performance Improvement: Trimming Resistance Network*. Synopsys Shanghai. Nov 14, 2016.
- Jasmine Chen. *Profiling & Graph Visualization*. Synopsys Taiwan. Aug 17, 2016.
- Jasmine Chen. [State Space Search](#). NCTU Training Camp. Summer 2015.
- Jasmine Chen. [Basic Enumeration](#). NCTU Training Camp. Summer 2015.
- Jasmine Chen. [Essential C/C++](#). 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](#) through game reselling and trading. Was the first and only person in Taiwan to do so.
- [Had 3000+ followers on Twitch](#) being an active community member of esports and game streaming .
- Organized the [very first reddit AMA for TW/HK esports players](#).