

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

- **Incoming Software Engineer** at **Google Taipei**.
 - **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.
 - 11 years of experience in competitive programming. Led numerous teams and gave lectures.
 - Received 20+ national/regional awards in programming competitions.
 - Curated a well-received resource collection: "Awesome Competitive Programming" (1,800+ stars on GitHub).
 - 3 years of experience in gaming industries.
 - Wrote keyboard lighting effects, implemented website designs, managed servers and coordinated events.
 - 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](#)
- [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 project mentored by Mozilla to make managing GitHub organizations easier. Features a SQL-like syntax to fetch aggregate data from GitHub API. Wrote a SQL parser from scratch.
- **GPA: 4.01/4.30**
- 5 *Academic Achievement Awards* (Top 5% in class)
- 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 Engineer

Taipei City, Taiwan, Jul 2018 (expected) –

- **C**, **C++**, Systems Programming
- ChromeOS

- **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 Infrastructures and Search Infrastructures, to support and facilitate

iterative development.

- Wrote an extension that monitors local code changes and automatically recompiles, redeploys, and retests services.
- 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, which also led to improvements of test cases.

- **Synopsys**

R&D Intern

Taipei City, Taiwan, Jul 2016 – Aug 2016

- C/C++, Algorithms, Shell Scripting, Graph Visualization, Memory Profiling
- Designed, implemented, and analyzed a novel, efficient, scalable 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 several shell scripts and a custom memory allocator and for fully automated testing and profiling.
- Wrote [massif-cherrypick \(C++, 2016\)](#), a Valgrind extension to analyze partial memory consumptions.
- 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](#), an online learning platform initiated by the Ministry of Education in Taiwan.
- Examined problem statements, assessed feasibility and correctness of solutions, and validated test cases.

- **Cooler Master**

Independent Contractor

Taipei City, 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 City, 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 Scrapping , 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](#).