FUN IN PROGRAMMING

CUNY Queens College
CS111 Lab Instructor: Chi Tse (Ricky)
AGENDA:

- Enjoy the fun in programming
- Online Practices
- Coding Competitions
- Hackathons/Programming Challenges
Star Wars: Building a Galaxy with Code
Learn to program droids, and create your own Star Wars game in a galaxy far, far away. (Ages 6+)

Minecraft Hour of Code
Use blocks of code to take Steve or Alex on an adventure through this Minecraft world. (Ages 6+)

Code with Anna and Elsa
Let's use code to join Anna and Elsa as they explore the magic and beauty of ice. (Ages 8+)
ONLINE PRACTICES

Solve programming challenges
Ask and answer questions
Study algorithms for coding interviews

A New Coding Interview Question Every Week

Subscribe Now
Welcome to the Timus Online Judge, problem archive with online judge system

The online contest finishes in: 3 h 30 min

Timus Online Judge is the largest Russian archive of programming problems with automatic judging system. Problems are mostly collected from contests held at the Ural Federal University, Ural Championships, Ural ACM ICPC Subregional Contests, and Petrozavodsk Training Camps. To start solving problems, visit the guide.

Timus Online Judge provides you an opportunity to participate in online versions of many contests held at the Ural Federal University on a regular basis. See the rules of online contests.

This site is created and administrated by the students and graduates of the Ural Federal University.
ONLINE PRACTICES

Project Euler .net

About Project Euler

What is Project Euler?

Project Euler is a series of challenging mathematical/computer programming problems that will require more than just mathematical insights to solve. Although mathematics will help you arrive at elegant and efficient methods, the use of a computer and programming skills will be required to solve most problems.

The motivation for starting Project Euler, and its continuation, is to provide a platform for the inquiring mind to delve into unfamiliar areas and learn new concepts in a fun and recreational context.

Who are the problems aimed at?

The intended audience include students for whom the basic curriculum is not feeding their hunger to learn, adults whose background was not primarily mathematics but had an interest in things mathematical, and professionals who want to keep their problem solving and mathematics on the cutting edge.

Can anyone solve the problems?

The problems range in difficulty and for many the experience is inductive chain learning. That is, by solving one problem it will expose you to a new concept that allows you to undertake a previously inaccessible problem. So the determined participant will slowly but surely work his/her way through every problem.
ONLINE PRACTICES

Master any CS Domain

With more than five domains to choose from, you can decide if you want to improve your coding skills on Artificial Intelligence or Machine Learning. Whether you are a beginner or an industry veteran, you will find several contests that challenge you and help you boost your coding chops. Think you’ve mastered a domain? Great. Go ahead and practice to excel in another domain.

Artificial Intelligence

Algorithms

Functional Programming

Code Golf

Machine Learning

What is CodeProject?

CodeProject is a community of Software development and Design developers joined together with certain common goals: to learn, to teach and to have fun programming. Developers from all over the world come together to share source code, tutorials and knowledge for free to help their fellow programmers.
Coding Competitions

Compete

This is the place to show off your skills

Try your hand at one of the competitions; solve a problem and write great code. Put yourself up for recognition and win great prizes.

Contests begin on the first of every month.

Future Contests

<table>
<thead>
<tr>
<th>CODE</th>
<th>NAME</th>
<th>START</th>
<th>END</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPC15P1A</td>
<td>ICPC Preparatory Series by Team SkullCrackers</td>
<td>2015-11-25 21:30:00</td>
<td>2015-11-26 02:00:00</td>
</tr>
</tbody>
</table>
## SCHEDULE

### Online Qualification

<table>
<thead>
<tr>
<th>Online Qualification Rounds</th>
<th>Time</th>
<th>Max # of Competitors</th>
<th>Max # of Advancers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1A</td>
<td>Saturday, April 11 at 12:00</td>
<td>All members who have not previously advanced – limited to the first 2,500 Competitors who register in the Arena</td>
<td>750</td>
</tr>
<tr>
<td>Round 1B</td>
<td>Saturday, April 25 at 12:00</td>
<td>All members who have not previously advanced – limited to the first 2,500 Competitors who register in the Arena</td>
<td>750</td>
</tr>
<tr>
<td>Round 1C</td>
<td>Saturday, May 9 at 12:00</td>
<td>All members who have not previously advanced – limited to the first 2,500 Competitors who register in the Arena</td>
<td>750</td>
</tr>
</tbody>
</table>
Coding Competitions

ACM Regional Collegiate Programming Contest
Sponsored by IBM

Greater New York Region

Sunday, November 8, 2015
Queens College (Flushing, Queens)
Contest announcement mailing list

2015 General Contest Information

- Contest rules
- Final standings
- Problems
- Hosted by: Queens College Department of Computer Science located in Flushing, Queens
- Date: Sunday, November 8, 2015
CODING COMPETITIONS

Facebook Hacker Cup

Website

Timeline | About | Photos | Likes | More

851,999 likes

ABOUT

The Facebook Hacker Cup is an annual worldwide programming competition where hackers compete against each other for fame, fortune, glory and a shot at the...

READ MORE

http://www.facebook.com/hackercup/

Facebook Hacker Cup
November 17 at 4:47pm · 📝

We're excited to announce the dates for the 2016 Facebook Hacker Cup!

Qualification Round: January 8, 2016, 4pm PST - January 10, 2016, 4pm PST (72 hours)

Round 1: January 16, 2016, 10am PST - January 17, 2016, 10am PST (24 hours)

Round 2: January 23, 2016, 10am PST - 1pm PST (3 hours)

Round 3: January 30, 2016, 10am PST - 1pm PST (3 hours)

Also, we're especially excited to announce that the onsite finals will be held at Facebook London this year!

Onsite Finals: March 3, 2016, times to be announced
Google Code Jam 2016

#CodeJam2016

Google Code Jam returns for the 13th year as one of the most challenging programming competitions in the world, and we're excited to announce new changes! The contest, which consists of intense algorithmic puzzles held over multiple online rounds, and culminates in an Onsite Final round, is ever-expanding. Click here to learn more about how we are innovating the second instance of the Distributed Code Jam Track.

Let's see if last year's Code Jam Champion (Gennady Korotkevich) and Distributed Code Jam Champion (bmerry) can hold on to their titles at the 2016 Onsite Finals as the top 26 (25 Code Jam Finalists and last year's champion) and top 15 from Distributed Code Jam duke it out at Google's office in New York, New York -- home of the Empire State Building, the Statue of Liberty, and much, much more!

Don't forget to mark your calendars for Tuesday, March 8th, 2016, when registration opens!
# Hackathons/Coding Challenges

[DEVPOST](https://devpost.com)

## Participate in online and in-person hackathons.

**Search by title, keyword, or location**  
**Type:**  
**Sort by:**

<table>
<thead>
<tr>
<th>Hackathon Name</th>
<th>Prize Amount</th>
<th>Duration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samsung Makers Against Drought Challenge</td>
<td>$210,500</td>
<td>2 months</td>
<td>Online, Makers Against Drought</td>
</tr>
<tr>
<td>RootsTech Innovator Showdown</td>
<td>$100,000</td>
<td>7 days</td>
<td>Online, 3 experts, anonymous judges, large audience, $100,000, leverage the power of genetics, support for innovation in human-computer interaction.</td>
</tr>
</tbody>
</table>
2016 InnovateHER: Innovating for Women Business Challenge

Challenge.gov
Government Challenges, Your Solutions

SBA
U.S. Small Business Administration

$70,000 in prizes

InnovateHER: SBA is searching for innovative products and services that help impact and empower the lives of women.

Open Until: Dec 03, 2015

Posted by: Small Business Administration

Textile Test Methods Challenge

NTL
NASA Tournament Lab

$15,000 in prizes

The Textile Test Methods Challenge seeks to develop standard test methodologies for assessing the wear and tear of clothing.

Open Until: Dec 03, 2015

Posted by: National Aeronautics and Space Administration

Reach Higher Career App Challenge

Design apps to help students navigate education and career options.

Open Until: Dec 07, 2015

Posted by: Department of Education
HACKATHONS/CODING CHALLENGES

Upcoming Challenges

Upcoming Programming Challenges

- **Societe Generale Java Hiring Challenge**
  - **Opens at:** 07:30 AM - 12:30 PM, 27 Nov 2015
  - **Closes on:** 12h, 29 Nov 2015
  - **929 are registered**
  - **I want to register**

- **Craftsvilla Backend Development Challenge**
  - **Opens at:** 07:30 AM - 12:30 PM, 27 Nov 2015
  - **Closes on:** 2h, 29 Nov 2015
  - **1440 are registered**
  - **I want to register**

- **November Clash '15**
  - **Opens at:** 01:30 AM - 01:30 AM, 28 Nov 2015
  - **Closes on:** 24h, 29 Nov 2015
  - **1399 are registered**
  - **I want to register**

- **December Easy '15**
  - **Opens at:** 01 Dec 2015, 11:00 AM - 02:00 PM
  - **Closes on:** 3h, 01 Dec 2015
  - **508 are registered**
  - **I want to register**
<table>
<thead>
<tr>
<th>Category</th>
<th>Contest Title</th>
<th>Difficulty Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth</td>
<td>Online Contest</td>
<td>Beginner</td>
<td>Code With NASA Science</td>
</tr>
<tr>
<td>Big Idea</td>
<td>Online Contest</td>
<td>Medium</td>
<td>Pitch your great idea</td>
</tr>
<tr>
<td>Hello Cloud</td>
<td>Online Contest</td>
<td>Advanced</td>
<td>The Power of Azure</td>
</tr>
<tr>
<td>Games</td>
<td>Global Competition</td>
<td>Beginner</td>
<td>Play to Win</td>
</tr>
<tr>
<td>World Citizenship</td>
<td>Global Competition</td>
<td>Medium</td>
<td>Change the World</td>
</tr>
<tr>
<td>Innovation</td>
<td>Global Competition</td>
<td>Advanced</td>
<td>Break the Rules</td>
</tr>
</tbody>
</table>
REFERENCES:

- http://web.engr.oregonstate.edu/~huanlian/teaching/advprg/
- http://nifty.stanford.edu/
- http://blogs.cornell.edu/teams/2015-teams/acm/