

# NCSS DAILY

JANUARY 2011: EDITION 1.1 BROUGHT TO YOU BY **Altium!**

## Day 2: getting started

The first day of solid lectures got to a drizzly start sometime around 8am - we were amazed to see a group of maybe twenty students participating in the morning activities despite the early hour and the sudden change of weather!

After breakfast, students divided again into their groups (Python and embedded) for the first day where the lectures would be followed by tutorials directly applying the content of the lectures, involving taking basic steps towards the projects to come.

### PYTHON GROUP

The Python group entered the world of strings, input, variables and if statements. After that, they logged onto the cool new NCSS challenge website and put their skills to the test, from "Hello, World!" to calculating fuel efficiency and beyond!

### EMBEDDED GROUP

The embedded group learnt about the Arduino environment, which will be key to programming the boards that will soon control their Roomba robots. They used a short script to make their USB-connected boards blink, beep and even click!



## Trivial highlights

The evening's entertainment took the form of a trivia night, organised and run by the tutors. Groups 1-6 competed against each other and the tutors themselves in a series of trivia questions interweaved with what can only be described as "diverse" bonus rounds - hosted by the excellently attired Ben, Katrina and Kenni. A panel of tutor judges scored the efforts and passed on the scores to the Tron scoreboard team.

As well as normal trivia questions, we saw movies acted out in thirty seconds, a garbage bag fashion show, Invent-A-Pokemon, limericks dedicated to judging tutors and an epic Tron human-chain showdown in the carpet grid.

Congratulations to Group 4 for scooping victory by a shoulder and well done to all teams (and tutors!) for contributing to a great night!



**MORNING EXERCISES** We might have had trouble waking up early during the holidays, but these enthusiastic students and tutors certainly didn't!



**EMBEDDED PHILOSOPHY** John introduces the Arduino environment and describes programming as a link between human-readable and machine-readable language.



**HELLO WORLD** James points out the intricacies of Python formatting and structure - a key part to being a good programmer - and demonstrates the power of the language.



## TUTOR SPOTLIGHT

**Name:** Dominick Ng  
**Age:** 22  
**School:** University of Sydney

**What do you do?**  
Just finished a B.IT (Hons) with James working on interpreting natural language.

**Why NCSS?**  
I heard from friends that it was lots of fun and it is! I tutor at uni as well and take it seriously because it's really important.

**Future plans?**  
I'll be starting a PhD with James and also hopefully study overseas. I'm not 100% yet since there's still lots of time.

**Explain the Jenga tower:**  
Parallelism - so everyone could be working on building the same basic block. Not unlike the general direction of IT!

**Treasure hunt tip:**  
Do all the challenges - there is a metapuzzle worth lots of points if teams can get to it!

## AROUND CAMPUS



\* The Python group gets to work logging on to the NCSS challenge website, beginning a set of challenges that will teach them Python skills

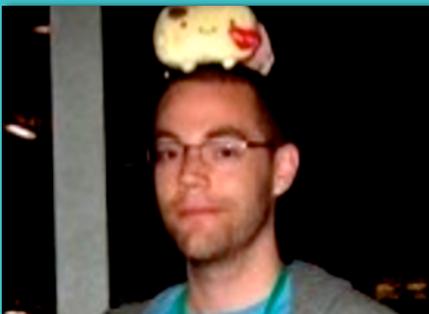


Poppy listens as tutor Michael explains the rules behind forming integers from raw input and how they apply to her fuel efficiency calculation



\* Damon edits the code and uploads it to the Arduino chip, stepping from making the LED on the board flash to making the unit click. We're looking forward to finding out the name of the Roomba!

## Q: WHAT WAS THE FIRST THING YOU EVER CODED?



"It was in the HyperCard programming environment for Mac when I was 8, I made a 3D isometric platform with trees that you could move through."  
— Will, NCSS tutor

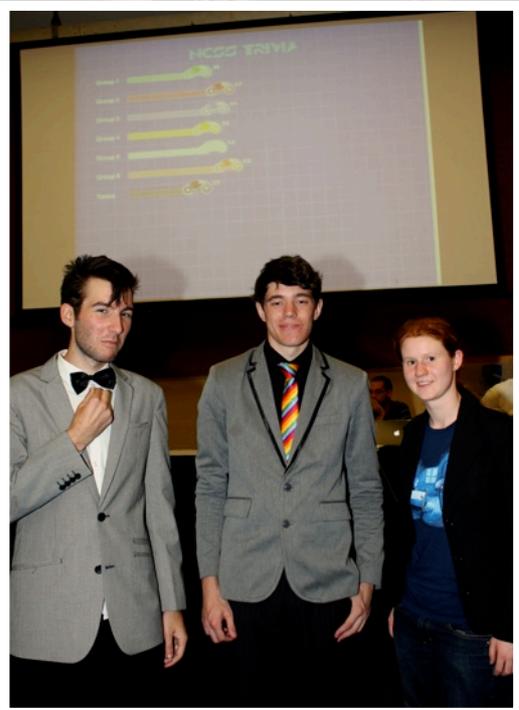
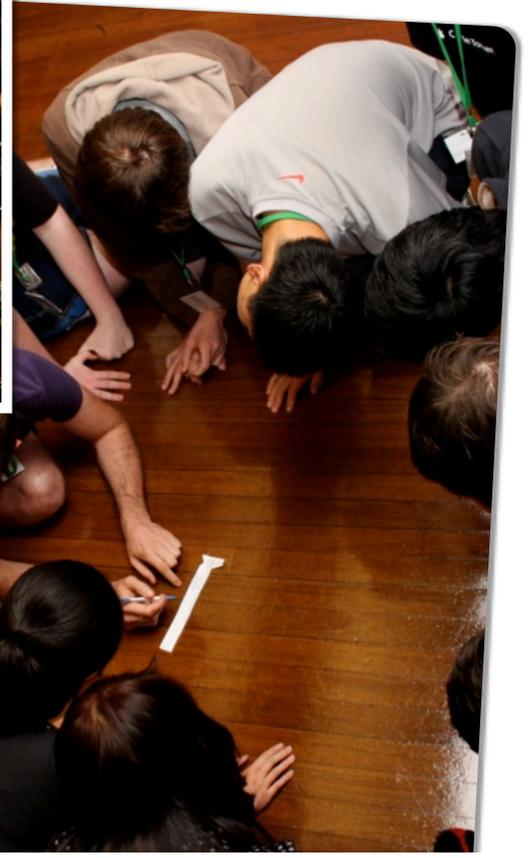
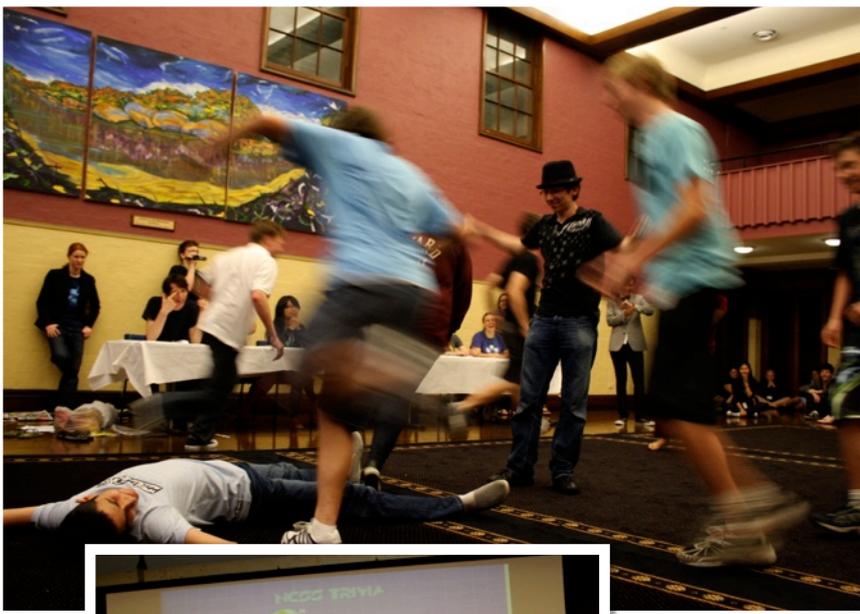


"I made a webpage about myself in HTML on Geocities (since disappeared), with lots of pictures and colours."  
— Tian, NCSS tutor  
"I remember! It was a drawing pad when I was in Year 9, using Visual Basic."  
— Kathryn, NCSS Python student



"I used Python to program a computer to self destruct in ten, nine, eight..."  
— Eric, NCSS embedded student

# TRIVIA NIGHT @ MENZIES



# What's been happening at NCSS?



## Yesterday's events in a nutshell and what to expect for today

The first day of lectures (and evening events) was a long one, stretching from as early as 8am to as late as 11pm (and later for some). Students had their first content-based lectures, learning basic commands that they'll need in Python and C to work on their projects and completing their first tutorials in SIT.

It's been really great to have a chance to interact with students and tutors, and a particular thanks to all those we surprised with mini-interviews today! The core of the NCSS is of course you guys and we hope to get to know more of you over the course of the school.

The trivia night was a lot of fun for all, putting teamwork and innovation to the test (as well as a bit of memory recall). An epic 3.5 hours of action!

### WHAT'S COMING UP NEXT?

Today will follow a similar structure to yesterday, with more tutorials and lectures deepening knowledge and getting further into the material to be covered. The evening's activity will be a campus-wide scavenger hunt - so get your treasure hunter gear on!

### Monday's schedule (03.01)

*Morning*  
Lecture/tutorial

*Afternoon*  
Lunch at Women's College  
Lecture/tutorial

*Evening*  
Dinner at Women's College  
Trivia night at Women's Menzies

### Today's schedule (04.01)

*Morning*  
Lecture/tutorial

*Afternoon*  
Lunch at Women's College  
Lecture/tutorial

*Evening*  
Dinner at Women's College  
Treasure hunt around campus

EDITION 1.1 BROUGHT TO YOU BY:

**Altium**

**Thank you to our awesome sponsors!**



THE UNIVERSITY OF  
SYDNEY



Industry &  
Investment

CargoWise

Google



### NEWSLETTER CREDITS

Editor: Vanessa Moss

Layout: Vanessa Moss/Thomas Kanold

Photography: Thomas Kanold