#### NCSS 2011

#### EDITION 1.7

NCSS DAILY

JANUARY 2011: EDITION 1.7 BROUGHT TO YOU BY 🔘 MACQUARIE!

# Day 9: of deadlines and wrapping up

The second-last day of NCSS, a bit of a euphemism since it blends seamlessly into the last day, began early on Monday morning with breakfast and a group photo. Students donned their NCSS shirts and posed outside Women's College (see page 2).

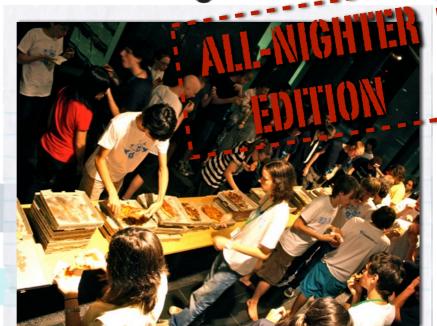
After this they split into their groups and worked on their projects. A general lecture given by James after lunch giving students an insight into their future study options was followed by lab work until dinnertime.

#### **PYTHON GROUP**

The Python students had their final lecture before heading to the lab to start bringing together their social networks. The networks themselves started to take shape as functioning websites, both visually and in the back-end!

#### EMBEDDED GROUP

The embedded group also had their final lecture before demonstrating their robots to visiting industry guests before dinner. The challenges went forth with great success and all robots were cheered on!



## How to stay up all night

Students and tutors once more participated in the annual NCSS allnighter, stretching from Monday evening till Tuesday noon when the official project work was declared complete.

The Roombas competed in a speed challenge with students filling the SIT foyer and cheering for the different Roombas. Freelancer kindly donated shirts after the challenge and a group photo was taken! The vibe in the lab was energetic leading up until midnight, with many group meetings taking place for the Python group and their social networks rapidly taking form. The embedded groups received their task for the night, to build a functioning Roomba railway and they set to work implementing the various features.

Pizza sustained the different groups in the early hours of Tuesday, and the students rallied together in the final 12 hours of the all-nighter to get their projects done. Congratulations to all students and tutors - you survived!



EAST SIDE OF CAMPUS Students assembled after lunch in the Oriental Room of the main quadrangle, as James gave a useful talk on future options after high school.



COUNTDOWN As the timer counts down, the Python groups discuss the different components of their websites and the progress they have made.



ROOMBA DEMO Embedded students demonstrate the rescue missions of their robots to visiting guest from NICTA, with success all around!



### "... Click. Share. Collaborate..."

#### Group I: CliqueShare

Adam Chyb. Ashlee Jensen. Cory Thompson. Harrison Rodgers. Jacob Bettio. James Cooper-Stanbury. Jarrod Small. Jasper Bedwell. Joel Stankiewicz. Katrina Tolentino. Laura Wenham. Lucy Denton. Michael Henderson. Neha Shivathaya.

CliqueShare was developed around the quintessential concept of sharing files in groups that can be used for projects. Group assignments can be collaborated by creating a specific project page where members can share files and communicate through the project wall. This feature allows all members of the project to track the project and have access to all the resources developed by group members.

Another key feature of CliqueShare is the ability to create groups or cliques that could be used for more generic groups of people such as sporting teams, social and cultural groups. This allows CliqueShare to be used for non-

"... a social networking site as well as a site to help you study..."

### **GROUP PHOTO**



educational purposes, which will ultimately help extend how CliqueShare can be utilised.

The website style and colour scheme has been designed in a sleek and modern fashion. 'James Curran Green' also known as '#397F7E' became the colour to complement the purple header and menu titles. Visual animated elements have been incorporated into the website including a personal profile pop-down activated by hovering over the curved grey tab and expandable menus to display the individual menu items.

Group 2: Cheatr Harrison Conlin Jarrad Frecklington Jordan Henderson Mitchell Jones Bruce Fuda Prashanna Kailasanathan Nicholas Cooke Vanessa Ung Jennifer Truong Karanbir Dhillon Sanea Khurana Chris Marwick David Zou

*.*...

### **GROUP PHOTO**



Cheatr is a social networking site as well as a site to help you study. So, if you spent too much time on Facebook when you're supposed to be studying, now you can do both at the same time!

The goal of the site is to make it easy to find study resources and notes for the subjects you do and connect with other students in the same subjects.

Since the notes are rated by the people who use them, you can find the best notes fast, and study better. It makes no sense for each student to study alone when they could be working together.



#### damonreece

#ncss i love you all too much, what's gonna happen in 3.5 hours? D':>\_\_>

#### Asterfobulongus

#ncss ends in five hours or so. So long to simulations, cryptography, programs, memes, obscure references, jargon, and other good times.

#### dominickng

All nighter survived. Caffeine consumption: 0. Survival rate: approximately 50% #ncss

#### gilesgardam

So ends a productive #ncss allnighter for group 1, over 5 000 lines of code in total.

#### AlfieTheRoomba

Sleep is for the weak.Alfie will be skynet soon.#ncss

#### ludechotic

Holy crap guys, I think we survived 0.0 #ncss

#### taybenlor

The best part about tutoring is teaching someone a general concept, leaving them alone and coming back Ihr later to see it working. #ncss

#### Spik3balloon

Midnight madness, oh so greasy. <u>http://youtu.be/</u> <u>TRt62IJRgzg</u> #ncss

#### 00Davo

Completed a user list for the chatroom! Events are transpiring in an excellent manner! #ncss

#### nickyringland

Thanks @freelancer for the awesome tshirts! #ncss http:// twitpic.com/30qtbz

### **Embedded: Group 5**

### **GROUP PHOTO**



#### Group 5

Anthony Ulrich, Caitlin Mangan, Denise Tang, Elle Rimon, Eric Lam, Gemmy Wattanaparada, Jack Leykam, Niel van der Westhuizen, Sean Thompson, Shaun Chong, Tom D'Netto, Victor Roussekov

. . .

"I heard about NCSS via Facebook and I attended because I thought it would be fun. I saw it as an adventure to try and challenge myself and further my knowledge in the IT industry. I would be able to meet a whole bunch of people with the same interests as me in the same age group and I strived to get in. It has been such a blast attending the 8 days of summer school and if the chance was to come up again I would not turn it down." - Anthony Ulrich "I found out about NCSS when my teacher suggested that I attend this summer school. Though I have had very little experience in programming, I thought this would be a great opportunity to further my knowledge of the IT industry. I have had lots of fun over these 10 days and will miss waking up at 6:30 every morning to go to exciting lectures and labs (oh and scoring chocolate). This has been an amazing experience and I am glad I attended NCSS 2011." - Elle Rimon

"The past 10 days have been a real eye-opener for me. I was introduced to C and learnt to program Arduino boards, so that Roombas execute basic movements and follow taped lines with their sensors. It's basically a term's course in 10 days! I've also been introduced to the team environment where I learnt how to cope with my roles as a team member." - *Gemmy Wattanaparada* 

### **Q:** WHAT HAS CHANGED AFTER NCSS?



"I learnt some programming and Python, and it definitely feels more accessible now. I'm hoping to apply it to my major project this year - making vending machine interface software." — Louis, NCSS Python student



"I didn't know any programming before but have learnt some C++. Coding is new and exciting! I really enjoyed the medical imaging Masterclass and am considering computer science and physics as well." — Jacinta, NCSS embedded student

# FINAL HOURS OF NCSS











#### STUDENT SPOTLIGHT

Name: Shelley Cooper-White Age: 17

School: Alstonville High (NSW)

#### What do you do?

I just finished Year 12, and will be starting university this year - the University of Sydney actually! I'm enrolling in B. Computer Science.

#### Why NCSS?

I'm a returner student. I did the online NCSS challenge and really enjoyed it, then applied for NCSS last year - which was really fun! So I came back this year.

#### Future plans?

I'll be starting university in March and studying all kinds of subjects. I'm interested in Al, web design, game development, but open to lots of other fields too.

#### Being a returner:

Working on the Python social network project last year was the best experience! We made a website called FacePalm.There are 12 returners - and we're dominating the zombie game.

#### How many kills?

ZOMBIE ALERI

I'm up to 22 at the time of this interview. They're all recorded on my arm. Between me, Victor, Joel and Farid, we calculated that we probably killed more than a quarter of NCSS. Returner pact!

**Best bit of NCSS so far:** Definitely Zombies vs. Humans it's been a lot of fun!

#### "... centred on uploading and sharing original music..."

#### **Group 3: Threebie**

Dominick Ng, Ben Taylor, Mike Lang, Lisa Fedorenko, Tian Pu, Brad Wootton, David McLean, Francesca McDermott, Francis Young, Justin Gock, Kathryn Chan, Louis Rankin, Mark Brodie, Poppy Wilson, Samantha Crome, Tom Grant, Xavier Murray

Our site, Threebie, is an up and coming social networking site centred on uploading and sharing original (usercreated) music promoting up and coming artists while providing a music loving community to hang out.

Using some neat AJAX and JavaScript tricks we were able to create a smooth and intuitive user experience with some neat animations. Our back-end was well designed more or less from the ground up to integrate with the front-end user experience to create features such as real-time chat and a smart updating feed that grabs new information and processes it automatically without the

"Photo pulse© the social networking site for all photography great and small..."

## **GROUP PHOTO**



user having to refresh. Sign-up is nearly instantaneous promoting the user to sign up and contribute to the community by allowing them to immediately start uploading and sharing their music as well as following artists who share their tastes.

Group 4: Photopulse

Samuel Crosby

Nick Carton

David Horst

Rochelle De Silva

Denbeigh Stevens

Georgia Judd Derek Peczek This experience is complemented by our 'cool-bar', which appears within each template page to enhance the following experience and display users who you are following to allow easy access to information forming a very natural user experience.

> Lauren Black Steve Hughes Nicholas Donaldson Toby Flemming Madeleine Eagles

Photopulse© is the new and exciting photo sharing site but with a unique and exclusive feature in comparison to other similar sites, you are able to socialise! Photopulse is well suited towards everyone's needs from families wishing to share their photos with friends to the professional photographer who wants to show employers or the public their favourite artworks.

This new social networking website is the new thing for everyone great and small, professional and amateur. Anyone passionate about taking photos, whether they are taken on a professional camera or they family Kodak, this is the site for you! Not only are you able to talk to others with similar interests you can view people's photos that you have never met before enabling you able to inspire your photographical instincts.

### **GROUP PHOTO**





### TUTOR SPOTLIGHT

Name: Maddy Reid Age: 20 School: University of Sydney

#### What do you do?

I'm in my second year doing a B. Information Technology - it's a four year course including Honours, and I've studied subjects like programming, systems analysis and math.

#### Why NCSS?

I came as a student in Year I I and also as a returner - it was lots of fun! I got involved in the Girls Programming Network and also tutoring because I enjoy outreach and teaching.

#### **Future plans?**

Survive uni! I'm considering doing a masters overseas or possibly working. Maybe research, but it takes a lot of self-discipline.

#### Interning at Macquarie:

I wanted to be involved with IT over summer and found out Macquarie offered internships. I love it! I'm working in a team rolling out Windows 7, and checking for compatibility.

#### Interning challenges?

It's scary because what you do counts. Even as an intern, I am accountable for my role in the project. It's more like real life which is pretty cool.

#### **Best bit of interning:**

The people! I really like meeting new people and finding out what they do. Macquarie has a system called Communicator where you can instant-message anyone in the company - I've been able talk to many people and learnt lots that way!

# **Embedded: Group 6**

### **GROUP PHOTO**



#### Group 6 (writer: Sylvia Chin)

Aidan Cameron, Damon Reece, Farid Mirmohseni, George Caley, Jacinta Franco, Joel Gibson, Nick Drabsch, Robert Newey, Shelley Cooper-White, Simon Victory, Sylvia Chin, Thomas Roberts

The people of group 6 and our tutors may seem like a bunch of average nerds at first glance but after attending labs lectures and lunches with them for the last 10 days I discovered that every single person is Awesome in their own way.

The pride and joy of Group Awesome was each of our Roombas; Alfie which belongs to Joel, Shelly and Aiden singing Sweet Child of Mine; Petrie belongs to Tom, Jacinta and Sylvia singing Eye of the Tiger; Bazooka that belongs to Simon, Nick and Farid singing Never Gonna Give You Up and finally Stumpy and the Stumps belonging to George, Robert and Damon, with the Roombas singing a Polyphonic rendition of The Final Countdown with 3 robots synced with IR signals. Our robots came a close second in the Robot relay which is still a job well done since we found several flaws in the track. Still everyone (on all four floors!) was entertained and cheered on our robots for the fact that it rescues the princess, no matter what the odds.

But making the Roomba go is not something we did without help. Thank you our extremely helpful, talented and patient tutors, Emma, Greg, Andrew, Steve and Edmund, for helping us fix our bugs, sync our songs, helping us learn and understand what the code, Arduino board, and its language, and showing us how much awesome Computer Science is and making NCSS fun. Group Awesome is Awesome and I'm very pleased I was part of NCSS and this group.



"I've learnt a lot about programming and Python, I'd really like to get involved in the Girls Programming Network. I'm hoping to come to USyd next year to study IT, physics and economics."

— Sanea, NCSS Python student

### **Q:**WHAT NEXT?



"NCSS convinced me to come to USyd, otherwise I might have stayed in Brisbane. I'll be doing a B. Computer Science, and eventually maybe a start-up company. Look out for the returners in a future business!" —Victor, NCSS embedded student

# What's been happening at NCSS?



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

It's the final newsletter of NCSS 2011 and it's been a big one! The students survived the all-nighter and the projects are looking fantastic. There have been a lot of adventures over the last 10 days, and many new friendships forged. It's been great to see the different projects coming together - thank you to all

groups for contributing a description of your project to the newsletter!

Personally, we'd like to thank all of the students, tutors, sponsors and affiliates of NCSS for all their help with making the newsletter - without your input and support we could not have made the newsletter what it was. Thanks for being awesome and we hope you've enjoyed reading it!

#### WHAT'S COMING UP NEXT?

The students have finished their projects and are currently preparing their presentations for the closing ceremony of NCSS 2011. It's been a blast for them and us, and we're glad to have been involved in such an awesome program. Congratulations to everyone for a super school and have a great 2011!

#### Monday's schedule (10.01)

Morning Lectures/tutorials/project

Afternoon Lunch at Women's College Lectures/tutorials/project Embedded demonstration

Evening Dinner at Women's College NCSS all-nighter!

#### Today's schedule (11.01)

Morning Project work Practice demonstrations

Afternoon Lunch at SIT Closing ceremony End of NCSS!



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#### NEWSLETTER CREDITS

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