



The Second GENI Research and Educational Experiment Summer Camp (GREE-SC 2013)

University of Connecticut
6/24-6/28, 2013

The Organizing Committee

Kaiqi Xiong and Yin Pan, RIT
Yong Guan, Iowa State University
Bing Wang, UConn
Mark Berman and Niky Riga, BBN

ACKNOWLEDGEMENT

We would like to acknowledge the generous support from National Science Foundation (NSF)/BBN, GENI Program Office (GPO), and the School of Engineering of the University of Connecticut.

We would like to thank many people of GPO, in particular, Mark Berman, Sarah Edwards, Chip Elliott, Manu Gosain, Niky Riga, Vicraj Thomas, and Henry Yeh, who have offered tremendous amount of help in planning and running the summer camp. They have spent a great deal of time helping with recruiting and selecting camp participants, arranging the camp curriculum, reserving GENI resources, providing tutorials, and coaching the labs and projects during the camp. Without their support, this summer camp would not have been possible. We also thank Bryan Lyles from NSF for his warm support to the summer camp.

We would like to thank Ivan Seskar (Rutgers University) for his insightful keynote speech, and thank all instructors and teaching assistants from various GENI development teams, Jim Griffioen and Hussam Nasir (Univeristy of Kentucky), Ivan Seskar (Rutgers University), Kuang-Ching Wang, Ryan Izard, Ke Xu and Fan Yang (Clemson University), Justin Cappos (NYU-Poly), Michael Zink, Divyashri Bhat and Cong Wang (University of Massachusetts, Amherst) for teaching GENI tutorials, labs and projects.

We are grateful to the generous support from UConn School of Engineering. Particularly, we are indebted to Michael Accorsi, Senior Associate Dean, Kazem Kazerounian, Interim Dean, and Mun Choi, former Dean and current Provost of UConn. We also thank Debra Mielczarek, Rebecca Randazzo and Howard Ellis (the Computer Science & Engineering Department), and several UConn students from the Networking Group including Abdurrahman Arikan, Ruofan Jin, Levon Nazaryan, Yuexin Mao, and Yuan Song, for their help with the logistics of the summer camp.

Finally, I am very thankful to the other members of the organizing committee, consisting of Mark Berman, Yong Guan, Yin Pan, Niky Riga, and Kaiqi Xiong, for their help with organizing the summer camp.

Bing Wang
June 20, 2013

On behalf of the Summer Camp Organizing Committee



Sponsors of the Summer Camp

This project is funded by BBN/NSF.

It is a collaborative project between RIT (Kaiqi Xiong (leading PI) and Yin Pan), Iowa State University (Yong Guan), and University of Connecticut (Bing Wang).



Welcome Message

We sincerely welcome you to participate in the 2013 GENI Research and Educational Experiment Summer Camp (GREE-SC2013) at the University of Connecticut on June 24 – June 28, 2013.

The Global Environment for Network Innovation (GENI) infrastructure is becoming a mature virtual laboratory for exploring future Internet at-scale. It supports at-scale experimentation on shared and heterogeneous GENI resources among multiple users, permits users to deep programmability throughout the network, and offers collaborative and exploratory environments for innovative research and education. More and more researchers, educators, and students have started or are starting to conduct research and educational experiments on the GENI infrastructure. NSF has sponsored more than 15 GENI experiment projects since September 2010.

This one-week long summer camp will provide you the opportunity to learn and experiment various tools available in the GENI environment through well-structured tutorials, labs and projects including:

- Introduction to GENI resources.
- OS installation and configuration for GENI experiments.
- GENI Portal.
- GEMINI tools.
- Omni and OpenFlow.
- ORBIT/WiMAX.
- ExoGENI and GIMI.
- Seattle GENI.
- Gaining hands-on lab experience with multiple GENI resources and use them to develop a team-based project.
- Lab sessions with GENI experts who will help you design and begin your experiment.

We truly hope that all of you will find this summer camp to be an interesting, enriching, and informative experience, and you will continue to use GENI in your research and educational projects. You are **strongly encouraged** to submit papers to the 2014 GENI Research and Educational Experiment Workshop (GREE2014). We look forward to seeing you in GREE2014.

Sincerely,

The Second GENI Summer Camp Committee:

Kaiqi Xiong and Yin Pan, RIT

Yong Guan, Iowa State University

Bing Wang, UConn

Mark Berman and Niky Riga, BBN

GENI Summer Camp Details:

Location: The summer camp will be held at the University of Connecticut. It will be in Laurel Hall (LH) Room 305 on Monday-Wednesday (6/24-6/26) and Friday (6/28), and will be in Information Technology Engineering Building (ITEB) Room 119 on Thursday (6/27). LH is a new classroom building. ITEB houses the Computer Science & Engineering Department and the Electrical & Computer Engineering Department. Both buildings are close to Gampel Pavilion (the building with a round dome).

The camp will run every day from 8AM-5PM, with an hour-lunch break from 12-1pm. Please note that we will end after lunch at noon time on the last day.

Pre-work and Agenda: If you plan to participate in the hands-on tutorials, please finish the pre-work beforehand. Information of pre-work and the agenda can be found at GREE-SC2013 website <http://groups.geni.net/geni/wiki/APRAGENI/GREE-SC2013>

Meals: Breakfast and lunch will be delivered outside the classroom every day. Breakfast will be from 7:30 am to 9:30 am. Lunch will be 11:45 am to 1:45 pm.

Lodging: Information of Busby suites is at http://www.reslife.uconn.edu/charter_oak_suites.html

Maps: Please find maps of UConn at <http://maps.uconn.edu>
A PDF version can be found at <http://www.uconn.edu/pdf/wholemap.pdf>



Internet Access: Guest WiFi account can be applied at <http://wireless.uconn.edu/connected/guest.html>

Group Dinner: We will have a group dinner at Chang's Garden on the first day of the camp (6/24) at 6-8pm. Its website is <http://changsgardenct.com>

Address: 1244 Storrs Rd, Storrs Mansfield, CT 06268

Phone: (860) 487-1688

Local Transportation: It's around 40-50 minutes' drive from Bradley Airport (BDL) to UConn campus. Information of airport shuttle is at <http://transpo.uconn.edu/#shuttleAirport>

List of Speakers and Participants

Name	University/Company	Status
Kevin Andrew	University of Kentucky	Undergrad
Abdurrahman Arikan	University of Connecticut	Ph.D student
Divyashri Bhat	UMass, Amherst	Ph.D Student/speaker
Justin Cappos	NYU-Poly	Faculty/speaker
Yufei Cheng	University of Kansas	Ph.D Student
E. Ilana Diamant	University of Washington	Post-doc Researcher
Henry Edward	CEN	Senior Network Engineer
Sarah Edwards	BBN/GPO	Network Scientist/speaker
Chip Elliott	BBN/GPO	GENI Project Director
Jeff Farese	University of Connecticut	Network Architect Lead
Ashkan Ghaffarinejad	Arizona State University	Graduate Student
Manu Gosain	BBN/GPO	Network Scientist/speaker
Jim Griffioen	University of Kentucky	Faculty/speaker
Yong Guan	Iowa State University	Faculty (remote)
Shufeng Huang	University of Kentucky	Ph.D Student
Shahram S. Heydari	U. Ontario Inst. of Tech, CA	Faculty
Ryan Izard	Clemson University	Ph.D Student/speaker
Cheng Jin	University of Minnesota	Ph.D Student
Ruofan Jin	University of Connecticut	Ph.D student
Meng Kuai	University of Alabama	Graduate Student
Depeng Li	Tennessee State University	Research Scientist
Bryan Lyles	NSF	Program Director/speaker (remote)
Yuexin Mao	University of Connecticut	Ph.D student
Hellen Maziku	Tennessee State University	Ph.D Student
Hesham Mekky	University of Minnesota	Ph.D Student
Hussamuddin Nasir	University of Kentucky	Engineer/speaker
Levon Nazaryan	University of Connecticut	Ph.D student
Phuong Pham	UC Davis	Ph.D Student
Niky Riga	BBN/GPO	Network Scientist/speaker
Sripriya Seetharam	U. of Missouri, Columbia	Master Student
Ivan Seskar	Rutgers University	Network Scientist/speaker
Yuan Song	University of Connecticut	Ph.D student
Scott Taylor	UConn/CEN	CEN Director
Yunsheng Wang	Temple University	Ph.D Student
Bing Wang	University of Connecticut	Faculty
Cong Wang	UMass, Amherst	Ph.D Student/speaker
Kaiqi Xiong	RIT	Faculty
Gang Xu	Iowa State University	Ph.D Student
Fan Yang	Clemson University	Ph.D Student/speaker
Henry Yeh	BBN/GPO	GENI Project Manager
Michael Zink	UMass, Amherst	Faculty/speaker
Shuai Jack Zhao	U. of Missouri - Kansas City	Ph.D Student