



TCNJ District Event March 14-16, 2013

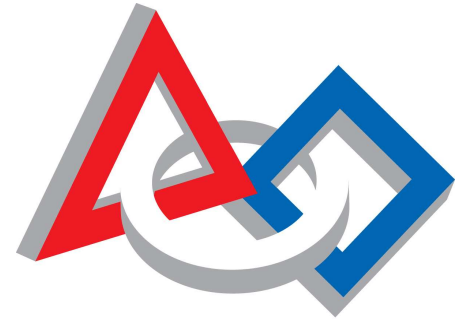
Hosted by US FIRST FRC Team 2016

Mighty Monkey Wrenches

Johnson & Johnson Consumer Products

Ewing High School &

Marie Katzenbach School for the Deaf



FRC

FIRST® Robotics Competition



TEAM VISITORS GUIDE

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Welcome to the TCNJ District Event

Thursday March 14 - Saturday March 16, 2013

Greetings from the TCNJ Event Committee:

Welcome to the TCNJ MAR District Event hosted by FRC TEAM 2016. Team 2016 The Mighty Monkey Wrenches is comprised of dedicated students from both Ewing High School and the Marie Katzenbach School for the Deaf. This is our 7th year of competition and we are pleased that our first competition event of this season is also one we are hosting.

The College of New Jersey is a special place to have a robotics competition not only because it is at the center of the Mid-Atlantic Robotics region. It is also special because of its strong technology programs and, especially this weekend, because it is hosting some other technology events. The

[Trenton Computer Festival](#), in its 38th year, is perhaps the oldest microcomputer conference in the nation. Presentations, training events, and a vendor fair may offer a diversion from our competition on Saturday. Also starting Saturday afternoon is a computer programming competition, a [Hackathon](#), that will run through the night. More information on both events is posted later in this program.

The TCNJ Event Planning Committee is pleased to welcome so many dedicated students, coaches, mentors and families from 37 FRC teams to Ewing Township for this competition. We are looking forward to a great weekend of co-opertition!



Katzenbach Colts



Mighty Monkey Wrenches



Ewing HS Blue Devils



Event Contacts:

Co-Event Coordinators:

Shawn Volz - (609)658-7343 smdvolz@yahoo.com

Matthew Lawson - (609)240-7167 mplawsonni@gmail.com

Co-Volunteer Coordinators

Neel Belani - (908) 930-6007 nsbelani@gmail.com

Matthew Lawson - (609)240-7167 mplawsonni@gmail.com

VIP Coordinator

Cindy Hutchinson - (609)902-9847 goteam2016@comcast.net

Dining Coordinator

Lydia Quinn - (609)731-6192 lydia.quinn@verizon.net



Welcome to TCNJ!

2000 Pennington Road Ewing, NJ 08628-0718

The College of New Jersey

Driving Directions:

From the Pennsylvania Turnpike (Pittsburgh, PA and Ohio)

Take the Pennsylvania Turnpike/I-276 East to the Philadelphia/US 1 exit. Keep left at the fork in the ramp. Merge onto US 1 North Lincoln Highway. Stay straight to go onto US 1 North. Take the I-95 North exit toward Trenton. Merge onto Delaware Expressway/I-95 North. Proceed into New Jersey. Take exit 4 (Route 31/Pennington Road). Bear to the right off the exit ramp, you will be traveling south on Route 31. At the fourth traffic light (about 1.5 miles), make a left into the College entrance.

From Long Island

Take the Verrazano Bridge to Staten Island. Stay on 278 West to Goethals Bridge. After crossing the bridge, take first exit for 95 South (NJ Turnpike). Follow directions from NJ Turnpike below.

From the New Jersey Turnpike (Newark International Airport and North)

Using the New Jersey Turnpike, travel south to exit 7A, Trenton and Shore Points. Follow signs toward Trenton onto I-195 West. Follow signs marked 295 Princeton/Camden. Exit at "I-295 North/Route 1/95 South/Princeton." Continue on I-295 (becomes I-95 South) to exit 4. Turn left at the exit ramp onto Pennington Road/Route 31 South toward Ewing. At the fourth traffic light (about 1.5 miles), make a left into the College entrance.

From the Atlantic City Expressway

Take the Atlantic City Expressway West (toward PA). The expressway ends at Route 42. Follow Route 42 North to I-295 North. Continue on I-295 North (becomes I-95 South) to exit 4. Turn left at the exit ramp onto Pennington Road/Route 31 South toward Ewing. At the fourth traffic light (about 1.5 miles), make a left into the College entrance.



Sponsor for MAR's
TCNJ district event &
the Trenton
Computer Festival



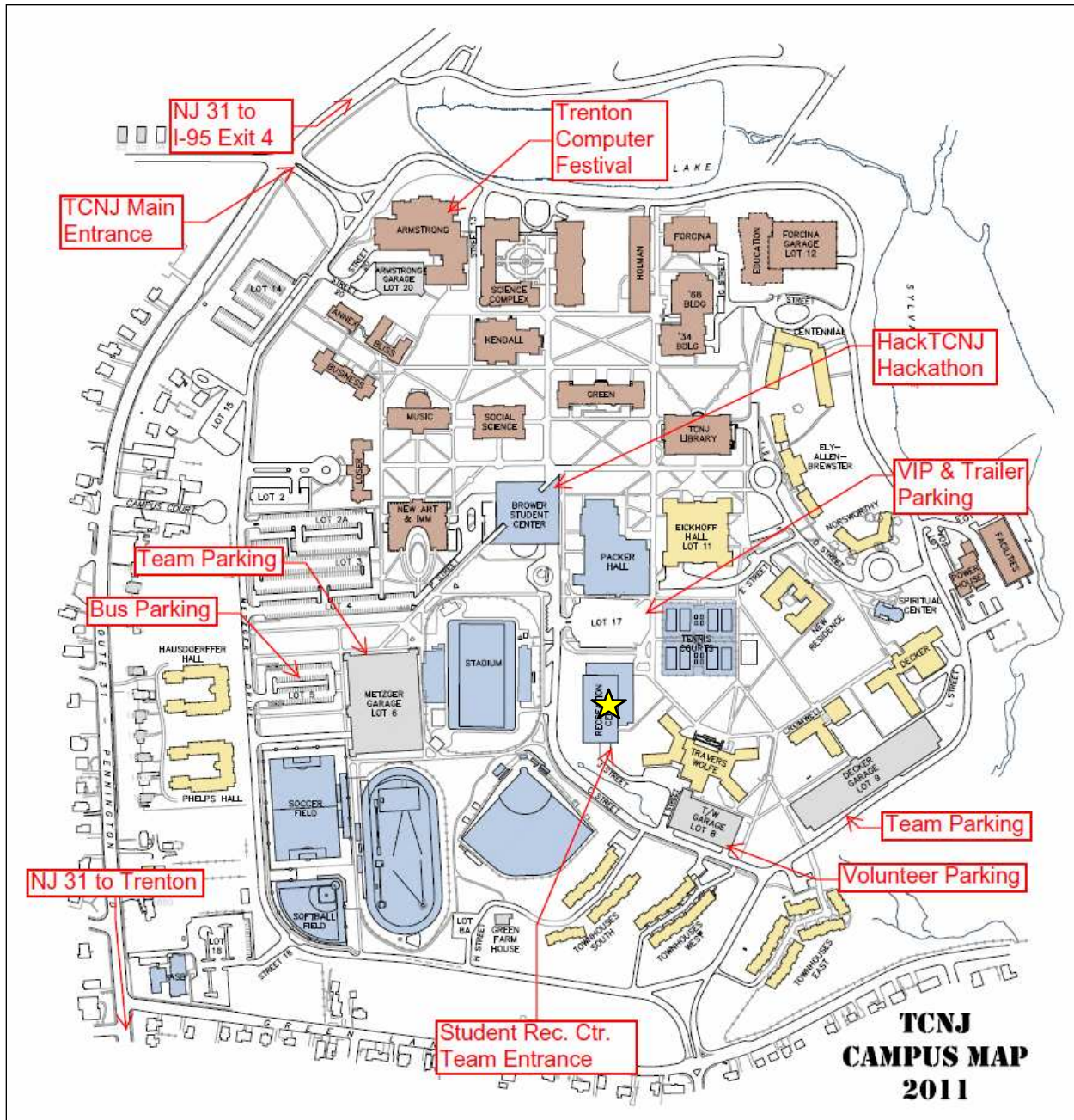
Parking Map:

★ Student Recreation Center, site of the event.

Parking: Buses lot #4

Trailers lot #17

General Parking lots #8 and #9



<http://tcnj.pages.tcnj.edu/files/2011/01/campus-map-2011.pdf>



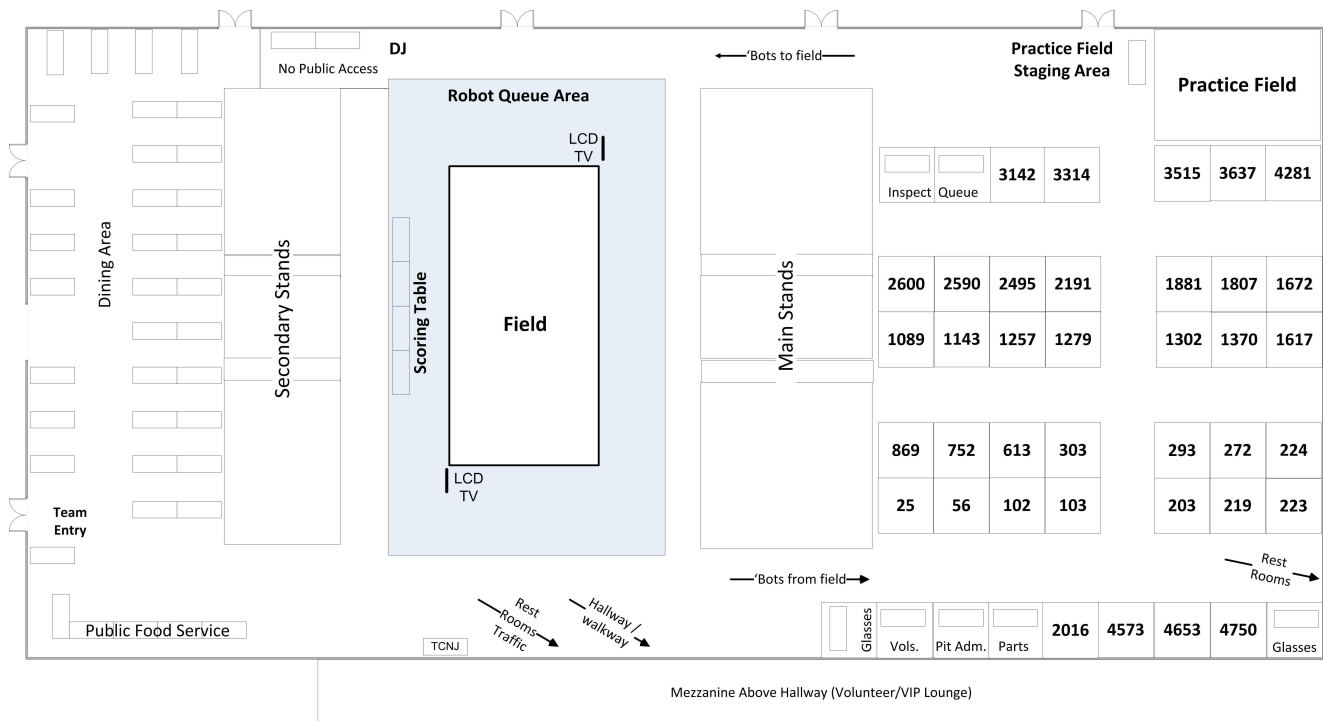
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Robot Load In:

General team entry and Robot Load-In and Load-Out are from southern (ground floor) entrance to the Student Recreation Center. This is accessible either from the driveway just west of Lot 8 (T/W Garage – volunteer parking) or from Lot 17 (VIP & trailer parking).

TCNJ Student Recreation Center Layout:

The College of New Jersey – Student Rec. Center – 37 teams



Chairmans' Presentations will be judged in a classroom of Packer Hall, across Parking Lot 17 from the Student Recreation Center. Directions will be posted. **Please consider protection for transporting display materials in case of rain or snow.**

Area Lodging:

Courtyard Ewing
360 Scotch Road
Ewing, NJ 08628
(609) 771-8100
Marriott.com/Courtyard

Element Ewing
1000 Sam Weinroth Road
East
Ewing, NJ 08628
(609)671-0050
www.ElementHotels.com

SpringHill Suites Ewing
1000 Charles Ewing Blvd
Ewing, NJ 08628
(609)530-0900
Marriott.com/SpringHillSuites



Local Hardware:

Village Hardware

525 Ewingville Rd
Ewing Township, NJ 08638
(609) 882-3936
[North on NJ 31 to next traffic light, turn right, entrance 50']

Home Depot

1621 N Olden Ave
Ewing Township, NJ 08638
(609) 393-3697
[South on NJ 31 to 4th light, Left on Olden Ave for one mile, look for it on your right]

Lowes # 1185

3504 Brunswick Pike
Princeton, NJ 08540
(609) 720-9008
[North on NJ 31 to I-95 North, to US 1, to Meadow Rd.]

RadioShack

1867 N Olden Avenue
Ewing, NJ 08618
(609) 771-1029
[South on NJ 31 to Olden Ave., Right, 500 feet on your left.]

Harbor Freight Tools

1550 North Olden Ave.
Ewing, NJ 08638
(609) 392-0764
[South on NJ 31 to Olden, Left for a mile, in shopping plaza past Home Depot on left.]

Grainger Industrial Supply

1585 N. Olden Ave.
Trenton, NJ 08638
(609) 394-2620
[South on NJ 31 to Olden, Left for a mile, on right after Home Depot.]

Fastenal

1875 N. Olden Ave.
Ewing, NJ 08638
(609) 530-0456
[South on NJ 31 to Olden, Right, left 500', in same plaza as RadioShack]

McMaster-Carr

200 New Canton Way
Robbinsville, NJ 08691
(609) 689-3000
[South on NJ 31, past Olden to Parkside (next light), turn right, continue straight to NJ 29 South, NJ 29 feeds into I-195 East, Exit 8 (N) toward Hightstown, New Canton Way will be on your left. About 30 minutes from TCNJ.]

Consent Forms:

FIRST revised the Consent and Release Form with several goals in mind: 1) simplify the process by creating a unified form; 2) collect participant data to make it possible to conduct more effective outreach and marketing to alumni; and 3) give *FIRST* the capacity to conduct regular follow-up studies of its participants in order to better demonstrate impact. This information is critical to *FIRST* because it will provide a roadmap for the

organization, guide program implementation and management, and communicate more confidently the impact to schools, sponsors and other groups. In order for *FIRST* to quantitatively state that our programs are positively impacting participating students, corporations, schools and communities we need to collect information on the individual level. The Consent Forms are the only place where *FIRST* collects that type of information.

The goal of the *FIRST* Consent Forms is to ensure the following

- ☐ To get consent and release of liabilities due to harm and/or injury for *FIRST* and *FIRST's* "Cooperating Entities".
- ☐ To grant *FIRST* the right to use participant's likeness during the participation in *FIRST* events.
- ☐ To ensure that agents of *FIRST* and on behalf of *FIRST* can collect and analyze information for us.
- ☐ To grant *FIRST* the right to contact the Parent/Guardian and participants at a later time for evaluation and/or announce other benefits like alumni outreach efforts.

We are dealing with youth and youth information; therefore *FIRST* must be in compliance with the US Children's Online Privacy Protection Act (under the age 13).

TWO Consent Forms are required for registration at this event

The Required Forms:

- ☐ A Team Roster.
- ☐ You must provide the completed **2013 *FIRST* Consent and Release** forms if these were not completed on line.
- ☐ The **Mid-Atlantic Robotics** event requires an additional completed release and waiver for each attending team member and mentor. Original, signed **MAR consent and release forms are required for EACH MAR event a team member attends.**

For both Consent Forms

- ☐ **Please:** Put your team number on each of the documents.
- ☐ Make copies of **each** form for each team member
- ☐ Have each person fill out **each** form.
- ☐ **Make sure each person under 18 has a legal parent/guardian sign each form**
- ☐ Separate the *FIRST* forms and the Mid-Atlantic Robotics forms into two piles and staple the piles
- ☐ **Bring both sets to the event registration table**

Event Rules:

Please read the following restrictions and adhere to them in order to promote an orderly and exciting competition. As a group, we all should honor agreements with MAR and FIRST and promote the spirit of good partnership.

- **Please do not remove any FIRST or Team number signs.** Signs are needed for multiple events.
- **Please do not remove any FIRST flying discs**
- **Please do not bring food** onto the playing field
- **Please do not sell any products.** This includes food, hats, shirts, or any promotional products.
- **Please do not give out any free food products,** such as candy, water, soft drinks, or fruit. You may trade team pins. Stickers and Decals are NOT allowed to be distributed as they are often left behind in the venue.
- **Please do not sell any raffle tickets.**
- **Please do not use extremely noisy devices** such as floor stompers, whistles, or air horns.
- **Please do not invite or bring live bands** to play in the audience. This dilutes the presentation on the playing field and is too confusing for the audience.
- **Do not play loud music in the Pit** as it interfere with important announcements. If a team is uncooperative, the power to the team's Pit Station will be shut off and/or the music confiscated.



- **Please do not save seats.**
- **Please do not bring helium tanks or balloons into the arena.**
- **Please do not arrange for internet access** on the site or attempt to connect to the Internet.
- **Please do not use walkie-talkies** as they interfere with the wireless radio used by event service providers as well as the regional staff.
- **Please do not form “tunnels”** during the Awards Ceremony
- **Please do not run in the venue.**
- **Please wear closed toe and closed back shoes in the Pits and on the playing field.** This means no mules or Crocs.
- **Please ensure that anyone in the pit area –including walkways—is wearing safety glasses.**
- **Finally, please respect the event staff as we are attempting to run a smooth event and keep everyone safe**

In Case of Emergency:

TCNJ Security will patrol the event. In an emergency at TCNJ, make sure to listen to the instructions of the event staff as it may be necessary to evacuate or clear a path for emergency personnel. We recommend setting up a team meeting place outside of the arena beforehand.

ALL INJURIES including bumps, scratches, and falls, should be reported to Pit Administration and a Medical Incident Report form completed.

Local Hospitals:

Capital Health Regional Medical Center

750 Brunswick Avenue

Trenton, NJ 08638

(609) 394-6000

[NJ 31 South to Olden Ave, Left to 6th light, Right on Brunswick Ave (US 1 B), ½ mile. Regional Trauma Center.]

Capital Health Medical Center – Hopewell

One Capital Way

Pennington, NJ 08534

(800) 637-2374

[NJ 31 North to I-95 south, Exit 3 (Scotch Rd) North. ER but mostly in-patient.]

Complaints, Lost and Found:

Please bring complaints and issues to the attention of Pit Administration. Significant complaints about volunteers, reports of arguments, altercations, or unsafe conditions should be documented with Pit Admin with a Non-Medical Incident Report form. Found items should be brought to Pit Admin, which will also have Lost Item forms for things that have gone missing.

The Pits:

Teams will receive a pit map when they arrive at the college on Thursday from the Pit Administration Table. A tentative pit map is printed above.

- ☐ Each team's pit station will have a table and power outlet. Each pit station will have an 18 amp fuse.
- ☐ Due to safety and insurance regulations, teams cannot build any structure that supports people or items for storage above the work area in their pit space.



- ☐ No structures should be higher than 10 feet above the floor and all structures must safely support any signs or displays mounted to the structure. *FIRST* will require the removal of any pit structure that is deemed unsafe by event management personnel and local committee members.
- ☐ The Team Checklist in section 7.16 of the *FIRST* Robotics Competition Manual has a checklist of items to bring to your pit station.

As a reminder, please bring:

- A 25 ft. heavy duty extension cord and a power strip
- A small cart to transport your robot from the Pit to the playing field
- Safety glasses for everyone on your team and your guests if they will be visiting the pits.

Machine Shop Information/Rules:

The TCNJ District Event will be supplied with a mobile machine shop, located outside the team entry doors. Below are the general rules and process for machine shop work requests:

- You must supply any material that is needed for repairs. The machine shop will not provide scrap material.
- You may not take work requests to the machine shop yourself. All requests must go through the machine shop coordinator table.
- One team representative can initially accompany their request to the machine shop via an event escort, but must leave after providing any needed explanations. You may not observe your job being worked due to safety and liability. If you like, you may wait for the part at the Pit Administration Table.
- All work requests are First Come First Served, unless a reasonable exception can be made. The machine shop cannot guarantee timing for any ASAP requests.
- Once your job is complete, a pit announcement will be made. You may also check back with Pit Administration periodically.

MAR TCNJ District Event Schedule:

Day 0, Wednesday, March 13, 2013

(Day before teams arrive)

Estimated People -- 30

9:00 AM	Field setup crew arrives to lay Gym Guard
	Bleacher crew arrives for setup (large install -- 1500 seats)
	Video projection screen hung over field, build field, lay out pit power
12:00 Noon	FIRST field truck arrives and unloads
3:00PM	Lay out field electronics
5:00 PM	Building clear

Day 1, Thursday, March 14, 2013

(Finish Setup in Morning - Teams Arrive in Afternoon)

Estimated People -- 30

9:00AM	FIRST Field Technical Advisor (FTA) arrives to set up electronics.
11:00AM	Pit setup begins -- includes pit power
12:00 Noon	Lunch
1:00 PM	DJ arrives
	Pipe and drape



- 2:00 PM Hang all signage, parking signage outside
Full AV/audio check
- 3:00 PM Competition volunteers arrive

Estimated People -- 400

- 4:00 PM Teams arrive -- load in robots to pits
Machine shop opens for teams
Inspection starts (when inspectors/inspection area ready)
- 6:00 PM Practice rounds begin
Food for purchase available
- 9:30 PM Pits, machine shop close
- 10:00 PM Building clear

*Note: Practice field is set up first to give teams some ability to practice during Day 1. If full field is complete, tested, and ready to go before end of Day 1, and if volunteers are in place, it can be opened to teams for unscheduled practice, first come first served.

Day 2, Friday, March 15, 2013**Estimated People -- 1100-1300**

- 7:00AM Volunteers arrive
- 7:30AM Teams admitted, pits, machine shop, inspection open
- 8:00 AM Practice matches begin
- 9:00 AM Opening ceremonies
- 9:40 AM Practice matches resume
- 10:30 AM Seeding matches start (It is recommended that the practice rounds stay as close to competition times as possible. Assume and try for a 6 minute match turnaround.)
- 12:30 - 1:00 PM Lunch
- 1:00 - 6:00PM Seeding matches
- 7:00 PM Pits and machine shop close
- 8:00 PM Building clear

Day 3, Saturday, March 16, 2013**Estimated People -- 1100-1300**

- 7:00AM Volunteers arrive
- 7:30AM Teams admitted, pits and machine shop open
- 8:30AM Opening ceremonies
- 9:00AM - 12:00PM Seeding matches
- 12:00PM - 12:30 PM Alliance selection
- 12:30PM - 1:15 PM Lunch
- 1:15 PM - 4:15 PM Final rounds
- 4:30 PM Pit power off -- pit cleanup begins where possible
- 4:30 PM - 5:30 PM Awards ceremony

Estimated People -- 30

- 5:00PM Load-out crew arrives, remove pit electrical
- 6:00PM Pits clear - cleanup begins
- 9:30PM Field & pits packed, Gym Guard swept and spot mopped

Day 4, Sunday, March 17, 2016



Estimated People -- 20

9:00 AM	Clean-up & bleacher crews arrive for tear down
10:00 AM	AV & electrician remove projection screen
2:00 PM	Bleachers removed, Gym Guard rolled & packed, venue swept

Teams Attending:

Team	Name	From
25	Raider Robotix	N Brunswick, NJ
56	ROBBE XTREME	Bound Brook, NJ
102	The Gearheads	Somerville, NJ
103	Cybersonics	Kintnersville, PA
203	One TUFF Team	Sicklerville, NJ
219	Team Impact	Washington, NJ
223	Xtreme Heat	Wanaque, NJ
224	The Tribe	Piscataway, NJ
272	Cyber-Crusaders	Lansdale, PA
293	Team S.P.I.K.E.	Pennington, NJ
303	TEST team	Bridgewater, NJ
613	NeoWarriors	Somerset, NJ
752	The League	Newark, NJ
869	Power Cord 869	Middlesex, NJ
1089	Team Mercury	Hightstown, NJ
1143	Cruzin' Comets	Clarks Summit, PA
1257	Parallel Universe	Scotch Plains, NJ
1279	Cold Fusion	Somerville, NJ
1302	Team Lionheart	Sparta, NJ
1370	Thermogenesis	Middletown, DE
1617	The Mighty Bulldogs	Newark, NJ

Team	Name	From
1672	T-Birds	Mahwah, NJ
1807	Redbird Robotics	Allentown, NJ
1881	Gamma Elite	Paterson, NJ
2016	Mighty Monkey Wrenches	Ewing, NJ
2191	Flux Core	Hamilton, NJ
2495	Hamilton West Robotics	Hamilton, NJ
2590	Nemesis	Robbinsville, NJ
2600	Team Falcon	Oak Ridge, NJ
3142	Aperture	Newton, NJ
3314	Mechanical Mustangs	Clifton, NJ
3515	Pneubotic Mustangs	Iselin, NJ
3607	TECHNOLOGIC	Lambertville, NJ
3637	The Daleks	Flemington, NJ
4281	BULL DOGS	Branchburg, NJ
4573	SRNJRambotics	South River, NJ
4653	Ironmen Robotics	Ramsey, NJ
4750	BE	Pennsauken, NJ

Other Events on Campus:

The 38th Annual Trenton Computer Festival

<http://www.tcf-nj.org/>

Location: TCNJ Armstrong Hall (School of Engineering)

Saturday, March 16th, 2013 - 9:00am until 5:00pm

Technical Talks and Presentations begin at 10:15am. Indoor flea market opens at 9:00am.

"TCF 2013 will again be a one-day Festival, with compelling talks, presentations and flea market. Computers and the Internet are continuing to evolve at a rapid pace. We can help you sort it all out. Smartphone? Tablet? Desktop? We will have talks and demonstrations by experts in all of these fields to help get you up to speed, and it's still only \$10 (free admission for children under 12) for a full day of talks and events."





Hack TCNJ 2013

<https://www.hackerleague.org/hackathons/hack-tcnj-2013>

Location: TCNJ Brower Student Center

Saturday, March 16, 2013 at 12:00 PM - Sunday, March 17, 2013 at 4:00 PM

"Calling all students in the greater NYC/NJ/Philly/DC corridor... Come hack your best app and compete for fame, glory and prizes at Hack TCNJ 2013! Located on the campus of The College of New Jersey, in Ewing, NJ, this hackathon welcomes students (both college and high school) for a friendly app-building competition."



Food:

Teams and Visitors will be offered food for sale as a Team 2016 fundraiser in the competition venue near the team entrance door. Attendees are requested not to bring in food from outside vendors. Volunteers and VIPs will have access to a food buffet on the mezzanine hallway overlooking the competition venue.



TCNJ MAR EVENT Lunch Pre-Order Form:



Please complete one form per day of competition. Fax to **215-457-4575** or email to Lydia.quinn@verizon.net. Payment may be made the day of competition and must be in the form of cash or check (payable to EHS Robotics). Please include a phone number on checks. Pre-orders must be received by **Wednesday March 13**. If there are any questions please call Lydia Quinn **609-883-6546**

Prices below are the pre-order prices. Many prices are higher at the event.

FRC TEAM NUMBER and NAME _____

Contact Name _____ Email _____ Phone _____

Cell Phone Numbers valid at the TCNJ Event: _____ | _____

PLEASE FILL OUT A SEPARATE FORM FOR EACH DAY OF COMPETITION

DATE (circle): Friday March 15; Saturday March 16

Item	Price Each	Quantity	Total
16" cheese pizza (8 slices)	\$12		
16" pepperoni pizza (8 slices)	\$14		
16" meatball pizza (8 slices)	\$14		
16" sausage pizza (8 slices)	\$14		
16" mushroom pizza (8 slices)	\$14		
Italian Hoagie 6"	\$5		
Turkey Hoagie 6"	\$5		
Roast Beef Hoagie 6"	\$5		
Veggie Hoagie 6"	\$5		
Hot Dog (all beef)	\$2		
Bottled water 16 oz.	\$1		
Coke 12 oz.	\$1		
Diet Coke 12 oz.	\$1		
Sprite 12 oz.	\$1		
		Total	

For Food Server Use Only:

☐ Contacted

sat	Microsoft	IT-PC	Robotics	Apple	Technology & Games	Education & STEM	Hardware	Software/ Apps	Arduino Workshop	OOP University	Amateur Radio	Exhibits
10:15am to 11:10am	C# .NET Programming D. Hsu	Provisional Patents H. Cheung	Autonomous UAV D. Bluman, K. Mitter, C. Kedemec, & J. Thomas	Discover iPad D. Marra	TCNJ Micromouse J. Eger	Getting Started: PCs/Pads, Internet & Digital Photography H. Hinitz	GPS Secrets 2013 C. Lewart	Developing Apps for Android Phones and Tablets B. Burd	Introduction to Arduino (Presentation)	Introduction to Java (Workshop) M. Redlich	Ham Cram 101	Special Exhibits and Demos
11:20am to 12:15pm	Microsoft Office 2013 D. Soli	Risk-based Security Management S. Shah	A Robot Conductor T. Nakra	OS X Mountain Lion D. Marra	TCNJ Solar Boat T. Wardlow	Updated Guide to Rest to Rest Web Sites & Search Engines E. Kaplan	Homebrew Projects G. Heron		Hands-On with Arduino (Limited Space; Bring Your Laptop!)		Ham Radio License Exam Preparation Cram Course	Digital Photo Exhibit 3D Printer/ RepRap Demos by IEEE Princeton / Central Jersey Section
12:25pm to 1:20pm		Identity Management for Humanitarian & Disaster Recovery A. Firestone	LEGO MINDSTORMS Robotics D. Ferguson	iBooks, Textbooks, & Authoring D. Marra	Sensor Communication by Energy Harvesting J. Jesson	How do Search Engines Work? M. Strelman	SATCOM on the Move A. Iepson, K. Christman, L. Lisooley, & J. Murduca	Internet Job\$\$\$ D. Hsu		Introduction to C++ M. Redlich	Ham Cram Sessions begin at 10:15am and 11:20am (50-minutes each)	Historic Computers from MARCH in Room AR-187
1:30pm to 2:25pm		Role of Human-Human Interfaces R. Herring	Robotics - An Introduction O. Hernandez	iLife: Photos, Movies, Music and More! D. Marra	Latest Technology in Console Computer Games R. Amidon	Keep Your Computer Bug Free R. Kessler	Build A Wireless Access System D. Ferguson	Operating a Business Entirely in the Cloud J.Mikusi	Arduino Open Hack; Makerbot Presentation; etc.	Advanced C++ M. Redlich	Practice Exam given at 1:30pm	Clubs
2:35pm to 3:30pm	D. Isbitski										Walk-in Real Exam given at 3:40pm	IEEE Micromouse
3:40pm to 4:35pm	Introduction to Windows 8 D. Soli	Social Media Integration and Analytics S. Krishnaje	A Fire Fighting Robot M. Lubaszka	iWork: Impressions, Spreadsheets & Presentations D. Marra	History of Mobility and Mobile Data L. Judice	The New Space Age G. Bunk	Smart Electrical Power Systems A. Grullon	Introduction to Agile for Engineers C. Glennon	Controlling the World with Arduino P. Bergsman	Introduction to OOP Design Principles M. Redlich	Conducted by the David Sarnoff Radio Club	Contest (Starts at 12:15pm by Rm. PHY-101)

2013 Trenton Computer Festival – Saturday, 16 March 2013

Focus on Robotics: Seven robotics-oriented talks plus a keynote on the Roving Rovers on Mars: The Journey of Curiosity.

Along with the Micromouse competition and the *FIRST* competition.

Keynote co-sponsored by IEEE-PCJS Robotics and Automation Society.)

Object-Oriented Programming University: Offers a one-day hands-on introduction to object-oriented programming by Mike Redlich, President of ACGNJ.

Events Co-located on Campus with TCF:

FIRST Mid-Atlantic Robotics District Competition:

TCF Attendees are invited to visit a *FIRST* district robotics competition being held in the TCNJ Student Recreation Center. Admission to the competition is free and open to the public.

HackTCNJ Hackathon. See students hack their best app and compete for fame, glory and prizes at Hack TCNJ 2013! Located in the TCNJ Brower Student Center. For Info: <http://hacktcnj.com>



NASA/JPL-Caltech/MSSS

2:25pm - Featured Keynote Speaker:
Frank O'Brien,
Solar System Ambassador
for NASA's Jet Propulsion Lab,
in Room Physics-101

TCF'13

Saturday Evening Banquet

Featuring a talk on

Featuring a talk on "Robot Explorers: Voyager & New Horizons"

by Aram Friedman,

Former Director of Engineering,
Hudson Building

Hayden Planetarium. New Education Bldg. Rm. 212. 6:00pm - 7:00pm.

6:00pm - New Education Bldg, Rm. 212
Admission: \$25

Tickets available on the TCF website
Admission: \$25

www.tcf-nj.org (by March 10th).

Pick up tickets on Sat. at VIP/Speakers desk.

Friday - ITPC 2013

The 8th TCF Information Technology

Professional Conference

8:30am to 5:00pm in Armstrong Hall

Friday, March 15, 2013

(Conference registration required.)

Info & Fees: <http://tcf-nj.org/pc>

info@toss; help@toss.org.jp