

The College of New Jersey, Ewing NJ Hosts The
47th ANNUAL ORIGINAL PERSONAL COMPUTER FESTIVAL

The 2023
Trenton
Computer
Festival™

TCF™ '23



The First and Longest-Running Computer Fair in the World!
Saturday March 18, 2023 | 9 am - 5 pm ET | Saturday March 18, 2023
<https://tcf-nj.org/>

In-Person Admission:
\$15 (advance), \$20 (at door)

- Children under 12 Free; Free Parking & Wi-Fi
- Free Streaming through <https://tcf-nj.org/>

Reminders:

- Ham Cram starts at 9:00 am
- Talks start at 10:15 am
- Vendors open 9:00 am—3:30 pm
- Banquet: 6:30 pm (extra fee)

Theme: Electric Vehicles and Related Technologies

Photo: New Jersey Electric Vehicle Association (NJEVA)



Keynote Speaker :
Lee Goldberg, 3:40 pm ET

Contributing Editor of Electronic Design Magazine
Author of the book "Green Electronics"



Photos: Pexels.com (3)

50+ Talks, Workshops, Tutorials, Demos, and Vendor Faire!
Robotics | Drones | Gaming | Sarnoff Tours | EV Car Events | OOP University (Python & Java)

Some of the many talks at TCF'23:



Jonathan Allen
How Green is an Electric Vehicle?



Joe Jesson
Global Communication After Power Failure



Chuck Knight
Program your EV with Python



Lou Justice
WordPress Bootcamp



Donn Fishbein
Stock Trading Using Neural Networks & Genetic Algorithms



Sharan Kalwani
Embedded Computing in Electric Vehicles



Barry Burd
Airline Pricing - Programmer Nightmare



Katalin Frolio
Hands-on Arduino Tutorial For Beginners



Eva Kaplan
Conscious Systems



Don Hsu
Will you Buy a Tesla? Why or Why Not



Rajesh Kannan
An Autonomous Multipurpose Service Robot, *Sudha*



Liz Najman
Common Misconceptions about Electric Cars

IEEE/ ACM IT PROFESSIONAL CONFERENCE
Friday March 17, 2023
Hybrid (In-Person & Streaming)**
Info: <https://princetonacm.acm.org/tcfpro>

Hack-Lo-Thon
Saturday March 18, 2023
For students to build skills in Internet-of-Things and compete for prizes!**
Info: <https://hackiothon.pages.tcnj.edu>

Ham Cram Session & Exam:
Saturday March 18, 2023
Get an Amateur Radio License in ONE DAY at TCF!
Cram begins at 9:00 am



Don Slepian
Wearable Synthesizer (Live Computer Music & Discussion)
12:25 pm

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TCNJ School of Engineering and Electrical/Computer Engineering Dept.
<https://electrical-computerengineering.tcnj.edu/>



EV Car Show and Ride & Drive
From 10:00 am to 2:00 pm (Weather Permitting)

The 2023 TCF™ is sponsored by The College of New Jersey, its School of Engineering and supporting organizations.

Track/Rm	T-1 /ED-115	T-2 /ED-113	T-3 /ED-213	T-4 /ED-211	T-5 /ED-208	T-6 /ED-206	T-7 /ED-204	T-8 /ED-109	T-9 /ED-112	T-10 /ED-110	T-11 /ED-103	
Saturday	EVs and Related Technologies		Tutorial & Tech	Social Media & Apps	History & Technology	Education & STEM	Technology & Robotics	Tutorials & Applications	Apps & AI	OOP University	Amateur Radio Starts at 9:00 am	
10:15 am to 11:10 am	How Green is an Electric Vehicle? <i>J. Allen</i>	How the Electric System Works <i>D. Benjamin</i>	WordPress Bootcamp <i>L. Judice</i>	Financial Cybersecurity: Are Your Retirement Investments as Secure as You Think? <i>C. Hofstetter</i>	The Most Important Computer You Never Heard of <i>F. O'Brien</i>	Exploring STEM Competitions <i>B. Wong</i>	Ending a Digital Life <i>D. Libes</i>	Personal Digital Audio Servers: The DIY Digital Audiophile <i>T. Arnold</i>	Writing Tech Books and Articles <i>B. Burd</i>	Introduction to Object-Oriented Programming & Design Principles <i>M. Redlich</i>	Ham Cram 101 Ham Radio License Exam Preparation Cram Course Ham Cram Session begins at 9:00 am and goes to about 3:00 pm, with lunch break at 12:30 pm. A practice exam precedes the real exam. The FCC requires payment of \$15 plus showing two forms of ID. You must bring your FCC Registration Number (FRN). If you do not have a FRN, go to www.tcf-nj.org/hamcram/ License Exam given at 3:30 pm. Conducted by the David Samoff Radio Club. www.n2re.org	
11:20 am to 12:15 pm	Common Misconceptions about Electric Cars <i>L. Najman</i>	Program your Electric Vehicle with Python and ODB-II <i>C. Knight</i>		Stock Trading Using Neural Networks and Genetic Algorithms <i>D. Fishbein</i>	An Approach to Excellence in Analog & Digital Sound Recording <i>S. Marshall</i>	Conscious Systems <i>E. Kaplan</i>	Autonomous Robot Guide Dog Autonomous Rover for Aid in Disasters Electric Power-Train for Two-Passenger EV/ATV	Creating Bug-Free Embedded Code <i>B. Wong</i>	Airline Pricing: A Computer Programmer's Worst Nightmare <i>B. Burd</i>	Getting Started with Java <i>M. Redlich</i>		
12:25 pm to 1:20 pm	The Future of Electric Cars <i>P. Krein</i>	Role of Embedded Computing in Modern Day Battery Electric Vehicles (BEV) <i>S. Kalwani</i>	Wearable Synthesizer (Live Computer Music Concert & Discussions) <i>D. Slepian</i>	Internet Job\$\$\$ <i>D. Hsu</i>	Lightning Detection Early Warning System High Altitude Weather Balloon Bouncing LoRa Signals Off the Moon	Mystabar2: New Educational Adventure Game <i>R. Cole</i>	Autonomous Multipurpose Service Robot "Sudha" <i>R. K. Megalingam</i>	Hands-on Arduino Tutorial for Beginners <i>K. Frolio</i> [Limited Space. Bring Your Laptop! Download the Free Arduino IDE Software from www.arduino.cc/en/software]	The Secrets of Quantum Computing <i>B. Burd</i>	Introduction to Python <i>C. Knight</i>		
1:30 pm to 2:25 pm	Will You Buy a Tesla? Why or Why Not <i>D. Hsu</i>	Electric Bikes: Past, Present, Future <i>R. White</i>	Electric Vertical Takeoff & Landing Changing Aviation <i>T. Quackenbush</i>	Autonomous Drone for Thermal Imaging Autonomous Race Car	Signals in Space: How, Where and What <i>S. Bossert</i>	Rebooting K-12 STEM Education <i>H. Hudicka</i>	Electronic Devices You Never Knew You Needed for Your Car! <i>P. Bergsman</i>	Using Field Programmable Gate Arrays (FPGAs) in Embedded Development <i>E. Williams</i>	iOS Shortcuts App (for iPhone Users) <i>D. Ferguson</i>	Pythonic Object-Oriented Development <i>C. Knight</i>		
2:35 pm to 3:30 pm	Electro Mobility a Transformation with Challenges <i>T. Ahlgrim</i>	Pathway to a Hydrogen Economy <i>M. Strizki</i>	Future Methods for Electrification of Airborne Transportation <i>G. Olson</i>	Global Communication After Power Failure <i>J. Jesson</i>	Getting Started on EME (Earth-Moon-Earth) Communication <i>A. Katz</i>	Intro to Cricut and Home Cutting Machines <i>B. Bell</i>	Introduction to Switch Mode Power Technology <i>M. Bianco</i>	Using Field Programmable Gate Arrays (FPGAs) in Embedded Development <i>E. Williams</i>	Digital Banner Display Smart Medicine Dispenser	Special Session: Ask Me Anything <i>M. Redlich, C. Knight & B. Burd</i>		
3:40 pm to 4:35 pm	Keynote Speaker: Lee Goldberg, author of "Green Electronics", and a Contributing Editor of Electronic Design Magazine; speaking on "Evolving EVs"											
6:30 pm to 8:30 pm	TCF BANQUET - Room ED-212 - Requires Advance Reservations (\$40, email Allen Katz: alkatz@tcnj.edu) and Purchase of Tickets by 13 March. Banquet Speaker: Lee Goldberg, presenting short remarks: Funny and Interesting Stories from the Industry											
Sarnoff Tours from 10:00 am to 3:00 pm in Roscoe West Hall. // EV Car Show and EV Ride & Drive from 10:00 am to 2:00 pm (Weather Permitting).												

