Speakers' Schedule
Forth Day
Presented by SVFIG

November 21, 2015
Third Saturday of November

Google+ Hangout

SVFIG will participate in a Google+ Hangout. Its YouTube video stream should let everybody watch this meeting in real-time, while questions and comments can either be posted on Google or emailed to the SVFIG email list. Contact Kevin Appert if you are not subscribed.

Meeting Dates

SVFIG will meet on the fourth Saturday of each month in 2015 with the following exceptions:
November (Forth Day) & December – These meetings will be held on the third Saturday
Any deviations from the posted meeting schedule will be announced.

Meetup RSVP

If you are planning to attend this month's meeting, please RSVP on Meetup.com. If not, there is no need to offer your regrets.

Notes for First-time Attendees

1) Print a Stanford map showing the meeting location, the Peterson Building, so you can find it easily. If you get lost, call Kevin Appert at 650/678-0532

2) Browse the additional online information.

3) Park in one of these suggested locations: along Santa Teresa Street, in the lot near the intersection of Santa Teresa Street and Lomita Drive, or in any “A” or “C” designated areas. There is no need to feed the parking meters on the weekends. Do NOT park in places marked with 24/7 restrictions! Most other spots are okay on Saturdays. **When in doubt, read the signs!**

Other Information

Meeting Notes including PowerPoint slides, PDFs, meeting videos, source files, meeting notes, and links from this and previous months’ SVFIG meetings, including those from past Forth Days, are (or will be) posted here, while Past Meeting Announcements are archived here and Other Meeting Details can be found here.

Meeting Schedule

8:30 --- Coffee and a Chat

9:00 --- Chairman's Welcome --- George Perry

9:04 --- Programming Challenge --- CH Ting

You can participate in the Programming Challenge by either building & programming your own breadboard before Forth Day or programming assembled boards available on Forth Day. The details of the challenge can be found here.

9:12 --- Radeus Labs Antenna Control Unit --- Leon Wagner, FORTH, Inc.

The Radeus Labs Model 8200 Antenna Control Unit enables satellite earth station antennas to accurately acquire and track geosynchronous satellites. It is designed to support robust, unattended operation for long periods of time. The RL8200 ACU is written entirely in Forth. The touch-panel user interface is in SwiftForth for Windows and three embedded modules (controller, encoder interface, and resolver interface) are all in SwiftX for ARM Cortex-M series microcontrollers. The entire unit (including all four Forth applications) was designed and developed in less than six months.

9:42 --- JavaScript to Forth and Back --- Aliaksei Chapyzhenka

Aliaksei will discuss his JavaScript and Forth experiments including:

- JavaScript compiler with the Forth machine as the target
- Forth system implemented in JavaScript
- In-browser Forth editor with real-time visual feedback

10:16 --- Personal EKG in Forth --- Bill Ragsdale

Bill Ragsdale will present and demonstrate two phases of a “non-Forth project”. This effort originated from a personal health issue motivating him toward building a portable EKG to monitor his own heart performance. The project stalled on the difficulty of implementing a Forth-based data interface to an iPhone. As is often the case, shifting priorities delayed this project. Then an FDA-approved commercial product (AliveCor Mobile ECG) was introduced for $85 with an astonishingly innovative data interface.

10:26 --- Break

10:36 --- Automated RISC-V Testing in an x86 World --- Samuel A. Falvo II
Sam will explain how he manages automated testing for the 64-bit RISC-V software for the Kestrel-3 on an x86-based computer.

10:56 --- Order Lunch from Treehouse
Lunch ordering signup sheet and menu will be provided.

10:56 --- Forth Haiku Interactive --- Brad Nelson
Color and computation collide in an interactive spectacle of light. Haiku Forth becomes a hands-on art display! Learn how to combine Arduino, ChromeOS Kiosk mode, the Chrome.Serial API, and the power of Forth to make lustrous visions dance and dazzle at the touch of a finger.

11:30 --- 4th.CoSy Topics --- Bob Armstrong
4th.CoSy's goal is to provide a computing environment in open Forth providing an APL informed vocabulary to succinctly express the combinatoric application of functions to arbitrary sets of data. Reference Counting, Stack Frames, and "Atomic" verbs will be discussed leading to the screen-scraping and an analysis of Model T ignition specifications.

12:00 --- Lunch
The Treehouse will deliver pizza -- you'll need to bring cash!

13:30 --- GreenArrays --- Charley Shattuck

1. A pre-recorded video (45:55) by Daniel Kalny describing a Near Field Magnetic Induction Communication (NFMIC) project using the GA144 will be shown.

2. Phitchaya Mangpo Phothilimthana and Michael Schuldt, Cal Berkeley students, will present Chlorophyll, a synthesis-aided compiler, loader, and simulator for the GA144 multi-computer chip

3. Charley Shattuck will describe a C Virtual Machine developed by Stefan Mauerhofer. The software has been tested by Charley using an assembler written in gforth, running code in Softsim, and debugged on the GA144 Evaluation Board using polyFORTH. (A C compiler for the virtual machine is also under development by Stefan.)

15:15 --- Break

15:30 --- Fireside Chat --- Chuck Moore

--- Group Photo and Roll Call Video
These will be posted on the SVFIG website. Your participation is - of course - optional.

--- Clean Up and Adjourn

--- Dinner at Fey Restaurant - 1368 Camino Real, Menlo Park - 650/324-8888 - Map

While we try to adhere to the schedule, sometimes a presentation runs a little long. If you're desperate to see a particular presentation at a specific time, please alert us and we'll do our best to accommodate your needs.

This schedule may be reformatted or line-justified, but please transmit it verbatim or not at all. A link to this page is preferred.

No Newsgroup posts or other media distribution please!

This schedule document is produced by Kevin Appert, the SVFIG Program Chair and is distinct from the information provided on the SVFIG and FIG websites which are produced by the SVFIG Webmaster, Dave Jaffe. Your comments, corrections, and suggestions are always welcome.