Welcome to another great year in our music and technology program at the College of Arts and Letters at Stevens Institute of Technology. Good news first. The S.S.R.C. is officially open. It’s been a long time coming.

My journey started back in 1987. The Mac Plus computer had just been issued, Roland and Casio were vying for the top synthesizer guitar spot and Andy Summers from the Police and I were the only people working with synthesizer guitars. So many sounds, so little time.

Two decades later I find myself being given the opportunity to continue my work and to share it with my students. I am so pleased that my journey has led me to Stevens. It is with great pleasure that I can now announce the opening of the Sound Synthesis Research Center.

During this first year, the dedicated room will serve as a creative workspace for visiting artists and special teaching faculty. The four principle themes that will guide the activities of the Center are as follows: Artistic Cultivation; Academic Advancement; Research and Development.

I’d like to thank Dean Dolling for her vision and faith in the center and myself. We also welcome the addition of Professor Ricky Graham who will be using the SSRC to continue his odyssey on pure data within a performance environment.
Our Inaugural Issue

The Music and Technology Program at Stevens, Music Performances and other resources available to CAL music students.

The Music and Technology Program at Stevens Institute of Technology is designed to provide undergraduate students with a comprehensive understanding of the relationship between music and technology. We view technology not merely as a tool that may foster the creative process, but as a mirror reflecting the creative spirit of the individual. In this regard, it is our mission and primary goal to provide the musicianship skills and technological aptitude necessary for any actively engaged musician.

This method will cultivate insight into the historically complimentary nature of music and technology. With such insight, we can actively engage the necessary critical thinking to foster creativity and innovation in music production, composition and technological design. A comprehensive musical education no longer rests on traditional conservatory training alone. Students who do not have a well-balanced education in music and technology will be ill prepared for the demands of the contemporary music world.

It is only through a demonstrated mastery of current technological tools that the music practitioner can bring an artistic conception to fruition.

All Music and Technology students will complete a "core" curriculum that will include courses in traditional music theory, history, composition, production, sound design, instrumental proficiency, performance, and technological innovation.

“Students who do not have a well-balanced education in music and technology will be ill prepared for the demands of the contemporary music world”

The performance curriculum in the Music and Technology program at Stevens highlights technological innovation in an extremely exciting and engaging way. After completing a series (4 terms) of private lessons in which the student gains proficiency on his/her declared musical instrument, the student will participate in a recital during his or her 4th term and then no less than 2 semesters of Music & Technology ensembles after that. The M&T ensemble is a faculty mentored music ensemble designed to promote an innovative approach to group performance.
The Motif is a music workstation that really has it all. It has grown over the years in polyphony and waveform memory. Its features include Yamaha’s AWM2 tone generators, massive polyphony (62 to 128 notes), an excellent sequencer, a sampler, A/D Audio inputs, AIEB2, mLAN compatibility, and stereo inputs. It has anywhere from 84MB to 355MB of sounds for thousands of waveforms. The Motif Classic is a perfect synthesizer/workstation for studio use as well as live applications. Used as a controller you can access all the synthesizer modules found in the racks.

Additional synths

-Keyboardist-

Roland JV1080
Roland JV880
Roland D110
Emu’s Planet Phatt.

DTXplorer has features like Groove Check and Rhythm Gate built in to help any drummer stretch and strengthen their abilities. For example, to tighten up your groove, engage the Rhythm Gate mode that automatically mutes the drums if your playing slips out of time with the click. The Groove Check function tracks a player’s accuracy by checking the dynamic consistency of their strokes to help increase playing precision and control. Need a band? Play along with a 4-piece rhythm section. When you’re ready, hit one switch, their drummer is gone and you step in. Join the band and show them what you’ve got. Flip another switch and it’s you and the bass player, to really learn how to lock in the groove.

-Drummers-

Yamaha DTXplorer Electronic Drum Kit

The DTXplorer is a great sounding 5-piece electronic kit from Yamaha with an impressive 192 drum voices and 22 keyboard voices on-board. It features 32 factory kits, 10 user kits and over 200 drum, percussion and effect voices. The individual voices can be used to build custom kits that can be employed at a moments notice. The DTXplorer is both a fine instrument and a problem solving machine. Because good drummers never stop learning, the
What does a vocalist live for? A jaw-dropping vocal sound, that takes audiences over the edge. One vocalist with all the possibilities! Need a choir for your intro? Want “Beach Boys” harmonies for the chorus? From Darth Vader to a trio of angels...Get the sound you want instantly with VoiceLive 2, the ultimate floor-based vocal processor. It's more than an upgrade; it's a vocal revolution. With a completely redesigned user interface, VoiceLive 2 is easy to use whether you're looking for one preset or a creative sequence of sounds for every song. VoiceLive 2 contains virtually all of the effects necessary to produce any vocal sounds of decades past and into the future. Like a great audio engineer, VoiceLive 2 listens to you and adjusts to make your voice sound smooth and produced.

The Sound Synthesis Research Center is part of the offerings to our music and technology students that include:

- Vocalist -

**TC-Helicon VoiceLive 2**

Footswitch-Controlled Mic Preamp with Harmony, Pitch Correction, Effects, and 250-plus Presets

We use Brian Moore iguitar 9-1.13 guitars for Acoustic, Electric, and Synth guitar applications.

Programmable iPad Interface/Pedalboard with 87 Effects, 54 Amp Models, Expression Pedal, Phrase Looper, 24-bit/44.1kHz Resolution, and USB

The iP-10 allows you to create your ultimate pedalboard, all on your iPad. Design a pedalboard by simply dragging and dropping up to 10 different pedals, in any order, to each pedalboard. You can even add an amp and cabinet to each setup. With 87 different effects, 54 amps, and 26 cabinets to choose from, your options are virtually unlimited. Simply swipe your finger across the iPad to rearrange your pedals, turn them on and off, or adjust their knobs.

**Sanctioned Ensembles for HMU 498 (Ensembles)**

**Free form Ensemble**

Music majors may form their own faculty-mentored ensemble or join one of CAL’s ensembles.

**The Mini-Midi-Magic Orchestra**

A guitar synth-ensemble that not only replicates organic instruments but exotic, as well as New Age sounds.

Band Leader: Carlos Alomar

**A.C.E.**

An alternative control ensemble that allows students not only to create their own controllers, but perform with them as well.

Chief Engineer: Rob Harari
The Roland GR-20 Guitar Synthesizer is the ultimate MIDI pedal for guitars.

The GR-20 Guitar Synthesizer makes playing high-quality synthesizer and instrument sounds from your guitar as simple as 1-2-3. First, plug in your guitar's 13-pin cord. Second, select the type of sound you want using the Bank knob. Third, choose a sound variation using the Number/Value dial and start playing. With the GR-20, it's easy to tap into the power of guitar synthesis. Is it a guitar synth or compact pedal? With the GR-20, it feels like both. Selecting a sound is like choosing an effect. First, select a sound category using the Bank knob. Categories include Strings/Orchestral, Wind, Brass, Bass/Guitar, Organ/Keyboard, Piano, Synth/Lead, Voice/Pad, Ethnic, and Rhythm/Percussion. Now you can select individual sounds using the Number/Value dial. At the heart of the GR-20 is an advanced sound engine based on Roland's professional synthesizers.

Sounds can be played with up to 48-voice polyphony for full, rich-sounding patches. And the sounds are equally impressive. From expressive string ensembles to spiritual tabla loops coupled with sitar—all with adjustable attack and release. Sophisticated DSP makes the GR-20's pitch detection ultra-reliable, so you can strum with confidence.

With decades of experience developing the industry's hottest guitar synths, Roland's GR-55 guitar synth and effects processor gives you more incredible tones and features than ever before, making laggy and inaccurate tracking a thing of the past. The GR-55 also includes Roland's world-famous COSM tone modeling. Together, these amazing processor cores open up never-before explored realms of tone and texture shaping. From pop to rock to undiscovered genres of music, the GR-55 has the guitar tones you need to stand out. Dive in and create your own intensely intricate patches, or keep it simple and explore the hundreds of built-in tones onboard.

The GR-55 has the perfect sounds for any music. Additionally, the GR-55 features an onboard USB memory music player with handy foot controls, so you can rock out with your favorite tones, long after the rest of the band's packed up. If you're ready to discover a whole new era of mind-blowing guitar tones, you're ready for the Roland GR-55.
Rehearsal sessions can be conducted within the JamHub environment. This assures each individual his own perfect experience (up to 7 people at one time). This also allows you the luxury of hearing all the rich effects you will be auditioning, in stereo. Then, you can jam with each other or not, in any combination desired. At the end of your session, press one button and the session is recorded.

*Bring your own headphones

Silent Headphone System

JamHub

Additional Notes

JUST IN!

Here it is… Dive into the Ableton Live 8.2 Suite and you'll soon see how deep it is. You get the breakthrough Ableton Live 8.2 digital audio workstation software - which gives creative musicians and DJs a unique and powerful way of composing, recording, editing, and performing. But, with the Ableton Live 8.2 Suite, you also get a collection of 10 virtual instruments, so you have a complete in-the-box solution for making music. Included are synthesizers, electronic and acoustic drums, mallets, strings sounds, and more. Make the most out of Ableton Live 8.2, with the Ableton Live 8.2 Suite.

Addition Notes #2

I am asking for volunteers from our previous recitals to go on a small tour of the old folks homes and community centers with me to bring some of the classics to under-served communities. All of you who already know songs from your recitals, imagine the joy for our elders to see music and technology as they've never imagined before.

Addition Notes #3

I would like to invite our guitar synth (MMMO) students and ACE students to participate in an experiment of sound Synthesis. I have asked members of our Chinese and Indian Societies to work with us. They will be using traditional instruments and we will be challenged to synthesize traditional instruments as well, for a possible performance.

I am hoping that if you close your eyes, you won’t be able to tell the difference.

Addition Notes #4

We will soon be offering a series called “The Secret Museum of Mankind”. The first series will be “ethnic music classics. I have selected CDs of World ethnic music 1920’s-1930’s. Recorded in its original form, with no western influence. It is a chance to truly study the orchestration of these amazing players in their exotic surroundings.

http://yazoorecords.com/ethnic.htm