

ADVERTISEMENT


[Home](#) | [latimes.com](#) | [Submit Events](#) | [Print Edition](#) | [Archives](#) | [Advertise](#) | [Help](#)
[search calendarlive.com](#)

February 3, 2006

[E-mail story](#) | [Print](#) | [Most E-Mailed](#)

calendarlive.com

[ART & MUSEUMS](#)  
[BOOKS & TALKS](#)  
[FAMILY & FESTIVALS](#)  
[MOVIES](#)  
[MUSIC](#)  
[NIGHT LIFE](#)  
[RESTAURANTS](#)  
[THEATER & DANCE](#)  
[TV & RADIO](#)

THE ENVELOPE

[Daily Calendar](#)  
[Calendar Weekend](#)  
[Sunday Calendar](#)

[Weather: 5-day](#)  
[Check Traffic](#)  
[Make a Reservation](#)  
[Dating / Personals](#)  
[Map it! / Get directions](#)  
[Contact Us](#)

PARTNERS



MARKETPLACE

classifieds and more

- Careers
- Cars
- Homes
- Rentals
- Times Guides
- Recycler.com
- Newspaper Ads
- Grocery Coupons
- Personals

COLUMN ONE

## That song sounds familiar

■ An online service helps users find new music through a "genome project" that maps tunes' traits and spits out matches.

By Steven Barrie-Anthony, Times Staff Writer

OAKLAND — In the beginning, there was music. Childhood and young adulthood floated by to a soundtrack of lyrics and rhythms and searing guitar riffs that consumed you, became you, constituted your identity, galvanized your intent, spoke your soul.

But time passes, classrooms fade to cubicles, and a vast landscape of new music turns foreign and unexplored. For Jeff Hersh, 31, the stereo came to double as Proust's madeleine, its purpose to invoke memories rather than create them.

ADVERTISEMENT

"Finding music was easier when I was younger," says Hersh, a vice president at Smith Barney in New York. "In college I lived in a fraternity house with 70 guys all around me at all times, listening to various kinds of music. But as you get older, you work more, you get isolated."

Then in November, a friend told Hersh about Pandora.com, an inventive "Internet radio" website that generates music streams — "stations" — based on one's favorite artists or songs. He started his own private thread of music that was a combination of Neil Young and Pearl Jam, Hersh says, and in an hour he heard more new music he liked than he had in the last decade, much of it from obscure bands that shared musical traits with Young and Pearl Jam.

He fine-tuned the station, giving a "thumbs up" or "thumbs down" to certain tracks, and soon he was loving nearly every song it threw at him. He started new stations, jotted down song names — and barely left his apartment that weekend.

Since the free version of Pandora made its debut in November (you can listen with no ads on the screen for \$3 a month), 8 million stations have been created, and record label and radio executives and technologists are aflutter with interest.

Pandora is more than just a fad; its unusual methodology, which marries traditional musical authority with the wisdom of a group of experts, raises philosophical questions about the shape of Net culture.

Customizable Internet radio such as Yahoo's Launchcast.com has been around for years, but Pandora is a twist on the concept: Instead of relying solely on computer

RELATED

[Addictive, but not potent enough](#)  
 Feb 3, 2006

Calendar

[That song sounds familiar](#)

[Addictive, but not potent enough](#)

[Misadventures in baby-sitting](#)

['Drive' offers an exhilarating ride](#)

[Jessica waits in line? Tell us more](#)

[Calendar section >](#)

Most E-mailed

[Don't call them misfits](#)

[Real monkeying around](#)

[Casing a foodie hangout](#)

[> more e-mailed stories](#)

software to spit out playlists, Pandora draws on its Music Genome Project, a 6-year-old effort by a group of musicians to identify the hundreds of traits and qualities that form the building blocks of music — and then to map out each individual song within this framework, or genome. Genre disappears, and every song is at once relatable, however closely or distantly, to every other.

"This raises the bar significantly," says Ted Cohen, senior vice president of digital development for EMI Music. "For the moment, it's the coolest thing out there. The whole idea seems to be to give people just enough interaction so that the listening experience gets better — and it works. When I plugged in the Raspberries and Todd Rundgren, it came back with Dwight Twilley. That's it! If Eric Carmen and Todd Rundgren had a child, it would be Dwight Twilley."

The operation's hub is in a nondescript building in downtown Oakland, where on a recent afternoon a dozen or so "music analysts" sprawled in front of rows of computer monitors, wearing headphones, tapping out rhythms and humming. They get paid \$15 to \$17.50 an hour to listen to music, and set their own shifts to accommodate gigs and recording sessions.

"This is an ideal job for musicians," says Rick Higgs, 55, a senior analyst who found the company through a "help wanted" poster in a record store. "They pay me for skills I never thought I'd use in a commercial context."

Analysts begin their shifts by selecting a CD from nearby bins and choosing a song, then they log on to the computer system and, using about 400 scales, identify and define the aural traits that make each song unique. They isolate and analyze each vocal thread and instrument, discern melody from improvisation. How lyrical or angular is the principal melody? Does the drummer tend toward sticks or brushes?

The result is that when a Pandora user seeds a station with Bob Dylan's "Mr. Tambourine Man," a message pops up informing the listener that the playlist arises from "folk roots, mild rhythmic syncopation, acoustic sonority, major key tonality and melodic songwriting." Song selection will always differ from user to user, but a certain "Mr. Tambourine Man" station began with Dylan's own "Farewell Angelina," Arlo Guthrie's "I'm Going Home" and Doc Watson's "Nashville Blues."

Technical complexity aside, Higgs doesn't care much for computers and says he has tried Pandora only once or twice. But like most of his colleagues, many of whom are struggling musicians, he feels strongly that Pandora will help obscure performers find an audience. After all, a user listening to Pandora is just as likely to hear an unknown garage band as the Rolling Stones.

And any musician, whether signed to a label or not, is welcome to send in a CD to be auditioned for inclusion in the database.

Many do. Pandora headquarters is overflowing with about 40,000 CDs: in crates, on desks, lining dozens of bookshelves around a pool table and a raised stage with a drum set, guitars and keyboards (for when analysts feel like taking a break and jamming). The majority were purchased by Pandora or sent by labels looking to publicize artists, but a steady stream of hand-addressed packages arrive from amateurs.

In the last decade, cheap personal computers and software such as ProTools have turned bedrooms into professional-quality recording studios. But the laissez-faire vision of a million musicians quitting their part-time jobs is thwarted by the reality that labels and commercial radio stations remain the stern gatekeepers to wider audiences and their wallets.

A handful of networking websites such as MySpace.com connect musicians directly with friends and fans.

"Pandora and MySpace are the best things that have happened to music in the last five years," says Adam Leiter, lead singer for Boston alt-rock band Sad Marvin, who recently sent an album to Pandora. "I like being able to stay independent, to market ourselves and manage ourselves. There's an absurd number of bands out there, but now if someone is using Pandora they can put in a band like Pearl Jam and out comes us."

Of course, there is the flip side. A hipster music lover who seeds her Pandora station with indie jewels may end up listening to some mainstream pop; the electroclash band Le Tigre, say, may spawn — among equally hip fare — Lindsay Lohan and Ashlee Simpson.

Included in the hundreds of e-mails that Pandora receives each day are complaints that the mainstream infringes on the counterculture, as well as an occasional admission that, umm, I guess maybe I kind of enjoyed it. "I just found out that I apparently like Enrique Iglesias," writes one user. "It was a really good song. Shameful."

One high school teacher is taking advantage of this cross-pollination to teach cliquish teens an appreciation of diversity and difference. "High school students use the style of music they listen to to define themselves," Michael Osborn, an English teacher in Broomfield, Colo., says. "I had been using Pandora, and I noticed that it tested some of my preconceived notions of music I thought I didn't like.

"So I built a lesson around Pandora. I have each student create a station, write an essay about what kinds of music they like and don't like, and then trade. It works, it catches their interest, and it's a great way for them to learn to respect each other, which helps when we move on to more sensitive subjects."

Yet some wonder whether Pandora's basic scheme is reactionary.

James McQuivey, an assistant professor of communications at Boston University, enjoys Pandora but notes that it "runs counter to the democratizing trend of the Internet." Instead of using "collaborative filtering" software pioneered by Amazon.com and Apple's iTunes ("customers who bought *this* album also bought *these* albums"), Pandora "puts the power of the recommendation in the hands of an expert system," McQuivey says. "Pandora will succeed only if its centralized system proves superior to the wisdom of the crowd."

Pandora founder Tim Westergren is delighted by users' enthusiasm. After all, five years ago, Pandora was an anonymous and struggling start-up, and now Westergren's workdays are punctuated by about 300 messages from users. He responds to all before falling asleep at 3 or 4 each morning; when his fingers ache from typing, he switches on voice recognition software and dictates into a microphone.

Westergren is 40 and looks 30, though at day's end his eyes are tired and the gray creeping through his brown hair appears more pronounced. But even on a few hours' sleep, he's boyishly enthusiastic about the possibility that Pandora will change the music world. He yearns, he says, for the day when "growing up wanting to be a musician is like wanting to be a teacher or a doctor," instead of the impractical journey it is today.

Pandora was born in part out of Westergren's attempt to eke out a living as a keyboard player in acoustic rock bands and his conclusion that "the music industry is broken."

"There's so much good music out there that ought to be supporting people," he says. "Instead of having 12 artists turn the corner, there should be 12,000."

He gave up touring and spent the late 1990s as a film composer in Los Angeles. The routine was always the same: "A director would say to me: 'Here's a couple of pieces of music that would work for this project. Now write me something new,'" he remembers. He was, essentially, functioning as an unconscious version of the Music Genome Project he went on to devise.

In January 2000, Westergren and two pals found investors, set up in a studio apartment in San Francisco and began listing the 400 or so variables that define their pop genome. (Other genomes would follow: hip-hop, electronica, jazz, world music.)

They hired analysts, but no average musician would do. Every analyst must have the equivalent of a four-year education in music, pass a music theory exam and complete 40 hours of training. Even then, 10% of the music is analyzed a second time by a "senior analyst," and any difference of opinion over a point on each of the hundreds of variables is flagged and reviewed.

They licensed technology to Best Buy and AOL, but the resulting recommendation engines — Like that? Try this! — didn't seem to harness the project's full capabilities.

In July 2004, newly arrived Chief Executive Joe Kennedy suggested that the company concentrate on delivering music as well as recommending it.

Although iPods are extremely popular, research suggested that users tire of the rigmarole of uploading new music and end up listening to the same playlists ad infinitum. At the same time, a large number of people have flirted with Internet radio (an estimated 45 million in 2004), but Pandora found in its study that few people are satisfied with the experience. The market seemed primed for a solution that walked the line between familiarity and exploration.

In short order, Pandora users created millions of stations — all without the company spending a dollar on marketing. Instead, employees respond to every comment, insult and inquiry they receive, and watch Pandora propel itself across blogs and podcasts and the physical world. This kind of viral marketing, which Google used to lure millions of users to its e-mail service, takes for granted that a retired janitor who blogs from his sofa might have as much marketing power as a full-page ad in Newsweek.

And then there's ye olde conventional word of mouth. Hersh, the vice president at Smith Barney, says he has

"personally turned on at least 50 or 60 people to Pandora. I've even used it as a pickup line with girls."

Despite its popularity, the company has not turned a profit. Licensing fees to play music over the Internet are higher than on terrestrial radio, about a cent and a half per listener per hour, and the ad revenue from the Pandora homepage, combined with commissions from Amazon and iTunes whenever a user clicks to buy an album or a song, isn't enough to cover expenses.

Westergren and Kennedy think profitability will come, and in the meantime they are in talks with cellphone, cable and other companies for the next step: snipping Pandora from the Web and making it portable.

That would be awesome news to Kelsey Schultz, 17, a student near Ann Arbor, Mich. "These days, a lot of people turn on MTV to find out what's popular," she says, "but with Pandora you can really expand your musical library and experience what's out there."

Still, if she finds a really fantastic new band, she might not tell her friends. "I like to keep my own secret music stash without people getting in on it." Then, when it pops up in somebody else's radio station, she can say: "That's my favorite band. I found them first!"

\*

#### Compatible music

Pandora creates personal "radio stations" by matching users' selected artists or songs with "songs and artists that have musical qualities similar" to their choices. The matching music selections are different each time a user inputs an artist or song, based on the aural characteristics of that particular search. Here are two examples:

#### **Original selection: Radiohead**

- "Dollars & Cents" by Radiohead
- "Stay Awake" by Dishwalla
- "Your Skull Is Red" by Team Sleep
- "Lonely Dirges" by Paul Michel
- "Packt Like Sardines in a Crushd Tin Box" by Radiohead
- "The Last High" by the Dandy Warhols
- "Will You Tell Me Then" by the Faunts
- "Treefingers" by Radiohead
- "God and Mars" by Days Away
- "Station in the Valley" by the Sea and Cake
- "If" by 13 & goD
- "No Surprises" by Radiohead

#### **Original selection: The Beatles**

- "Hung Upside Down" by Buffalo Springfield
- "Lady Luck" by Journey
- "I Me Mine" by the Beatles
- "My Destination" by Boston
- "For Pete's Sake" by the Monkees

- "Hot Child in the City" by Nick Gilder
- "Dream Away" by Afterglow
- "Starman" by David Bowie
- "Old Brown Shoe" by the Beatles
- "Caroline" by Jefferson Starship
- "Sleeping With the Television On" by Billy Joel

Source: Pandora.com

If you want other stories on this topic, search the Archives at [latimes.com/archives](http://latimes.com/archives).

**TMSReprints**

Article licensing and reprint options

Experience top-of-the-line  
home theater **like never before.**

**CLICK TO DISCOVER MORE ▶**



**MAGNOLIA**  
HOME THEATER

New Magnolia™ Home Theater  
stores in select Best Buy™ locations.



Copyright Los Angeles Times  
By visiting this site, you are agreeing to our [Privacy Policy](#)  
[Terms of Service](#)