The University of Iowa School of Music And
The Electronic Music Studios Present

Penelope's Loom
Judith SHATIN

Von Neumann's Last Dream
Todd PAPKE

Man and Machine
John GRIFFIN
Digital artwork and video by Matthew Priest

All at Risk
Scott WYATT

Mappaemundi
Lawrence FRITTS
With Sue Hettmanisperger and Walter Seaman

Faithfully Blind Followers to the Faithless
Andrew SCOTT

Junk DNA
Dennis HUTCHISON

Oh I am so Thirsty
Israel NEUMAN
Penelope's Loom (2003), for electronic playback, as an offshoot of my, both inspired by the story of Penelope, wife of Odysseus, whose travels and travels are told in Homer's epic, the Odyssey. Penelope was left at home during the twenty-year absence of Odysseus, first during the Trojan war, and then during his adventure-filled return voyage. Penelope needed to find a way to stave off suitors, filled with greed and arrogance, who tried to woo her in order to become King of Ithaca. Among her methods, Penelope announced that she would take no suitor until she finished weaving a shroud for her husband's aged father, Laertes. But she unraveled at night what she wove by day. This weaving and its reversal were musically suggestive, and I wove Penelope's Loom from a recording of local weaver Jane Russell, working on two wooden looms. I processed and shaped these sounds, weaving a new sound fabric, imprinted with the sounds of the looms.

Called "marvelously inventive" by the Washington Post and "exuberant and captivating" by the San Francisco Chronicle, Judith Shatin's music is inspired by her explorations and inventive extensions of timbre. Her music ranges from acoustic and electronic music, from chamber and choral to orchestral. It is internationally performed, ranging from BNM's Next Wave Festival to the World Music Days in Slovenia, and across Europe, to Israel and Asia. Her music is widely recorded, with a new disk of orchestral music called Pipining the Earth, just released on Capstone Records (CPS 8727). Her chamber music can be heard on the Centaur, Neuma, New World and Sonora labels. Her music has been commissioned by groups including the Ash Lawn Opera, Barlow Foundation, Ensemble I, Krones Quartet, National Symphony, Hexagon Ensemble and Wintergreen Performing Arts, the last through Americans for the Arts. A two year retrospective of her work, culminating in the premiere of COAL, a folk oratorio scored for Appalachian ensemble, chorus and electronics, was sponsored by Shepherd College, with major funding from the Lila Wallace-Reader Digest Arts Partners Program. Residences include Bellagio (Italy), La Cité des Arts (France), Mishkan Amanim (Israel), MacDowell, Yaddo and the Virginia Center for the Arts. Recorded on Centaur, CRI, Neuma, New World and Sonora Records, Shatin's music is published by Arsis Press, C.F. Peters Corporation and Don Michael Randel MMB/Notturno. Currently, Judith Shatin is William R. Kenan, Jr. Professor of Music and Director of the Virginia Center for Computer Music of the McIntire Department of Music at the University of Virginia. Her teaching focuses on composition, computer music and related topics.

Von Neumann's Last Dream: At the age of six, he was able to exchange jokes with his father in classical Greek. The Neumann family sometimes entertained guests with demonstrations of John's ability to remember phone books. A guest would see a page and column of the phone book at random. Young Johnny read the column over a few times, then handed the book back to the guest. He could answer any question put to him (who has number such and such?) or recite names, addresses, and numbers in order. Johnny was the only student I was ever afraid of. If in the course of a lecture I stated an unsolved problem, the chances were he'd come to me as soon as the lecture was over, with the complete solution in a few scribbles on a slip of paper. By his mid-twenties, von Neumann's fame had spread worldwide in the mathematical community. At academic conferences, he would find himself pointed out as a young genius. Von Neumann spent a considerable part of the last few years of his life working in automata theory. It represented for him a synthesis of his early interest in logic and proof theory and his later work, during World War II and after, on large scale electronic computers. Involving a mixture of pure and applied mathematics as well as other sciences, automata theory was an ideal field for von Neumann's wide-ranging intellect. He brought to it many new insights and opened up at least two new directions of research. When von Neumann realized he was incurably ill, his logic forced him to realize that he would cease to exist, and hence cease to have thoughts ... It was heartbreaking to watch the frustration of his mind, when all hope was gone, in his struggle with the fate which appeared to him unavoidable but unacceptable ... his mind, the amulet on which he had always been able to rely, was becoming less dependable. Then came complete psychological breakdown; panic, screams of uncontrollable terror every night. His friend Edward Teller said, "I think that von Neumann suffered more when his mind would no longer function, than I have ever seen any human being suffer. Von Neumann's sense of invulnerability, or simply the desire to live, was struggling with unalterable facts. He seemed to have a great fear of death until the last... No achievements and no amount of influence could save him now, as they always had in the past. Johnny von Neumann, who knew how to live so fully, did not know how to die."

Todd Papke is graduating in May with a BA in Interdepartmental Studies. His program was designed with an emphasis in Digital Storytelling. He begins his MA work in The School of Journalism and Mass Communications this fall. He has been studying electronic composition with Professor Fritts.

Man and Machine draws inspiration from digital artwork by Matthew Priest entitled "The Human Computer." It attempts to convey the melding of human beings with the machines that have come to so totally dominate life in the twenty-first century (especially computers). Over the course of the work, sustained wordless sounds gradually meld with computerized and mechanical noises. By the end, his engines of its own creation until man and machine have become indistinguishable.

John C. Griffin is a pianist and composer from Kalamazoo, Michigan. Currently, composition at the University of Iowa, where he studies with David Goodner and his Bachelor's degree (2002) and Master's degree (2004) in music composition from WMU, he studied piano with Lori Simms and composition with Richard Adams, an undergraduate, he was the recipient of a four-year WMU Medallion Scholarship and the Graduate College Fellowship for the 2002-2003 academic year. At UI Griffin Music Theory.

All at Risk attempts to share some of the feelings I had when recently reed an old friend who had been sent to Iraq to cover ongoing events there. The emails were read with them. I have left out the much more graphic moments as I feel the excuse from the basic message of this piece. The stress and overall sense of helplessness with a better sense of the amount of danger that those in Iraq face on a minute-by-minute creation of this work. I wish to express my appreciation to news correspondents in his email, and to my assistant John Ritz for his help with the video editing.

Scott Wyatt, composer and Professor of Composition, is the director of the University and among other honors he has received was one of the winners of the International Music Composition Competition 1978, the National Flute Association Composition Competition, the Internazionale Luigi Russolo Composition Competition in Italy, the 1984 International Music Grand Prise at the 12th annual Internationale Electro-Acoustic Music Competition in the 1989 International Electro-Acoustic Music Competition in Bourges. Arnold Beckman Research Award for the development of digital timescaling and the development of specific computational and live performance channel sound diffusion and projection. His current research is on the development of three-dimensional audio imaging for multi-channel audio. He served as president of SINUS compositions are recorded on CENTAUR, GMB Cultures Electroniques Quadriachs, SEAMUS, IUBRES and VERITAS recordings.

Mappamundi is a 9-minute work for digital animation and computer-realized sound composer Lawrence Fritts, and mathematician Walter Seaman. Like Medieval maps, our Mappamundi is an attempt to capture the geographical, spiritual, and emotional worlds—our Mappamundi map or transport our understanding and communicating. Thus, visual images are treated like sounds, mathematical thought, and mathematics becomes a way of understanding artistry. Mappamundi is based on a series of paintings by Sue Hettman spar that explore the natural world. The artist digitally transformed and animated these images structures. These structures were combined with mathematically-generated images, biological forms of nature and the mathematical structure that lies beneath. The physical world of sound and its abstract representation. The sounds in the work, mapped in a body in an anechoic chamber. Breath and heartbeat were then digitally analyzed into components. These fundamental units of sound were then recombined to create an extends the physical and emotional worlds evoked by the work's visual imagery. at the mathematical level, where color, form, spatial orientation, and movement is to create complex, evolving geometrical, topological, and algebraic structures.

Lawrence Fritts was born in Richland, Washington. He serves as Associate Professor of Computer Science and the University at the University of Iowa, where he has directed the Electronic Music Studio Composition from the University of Chicago, where he studied with Shulamit Ran. His music is recorded on the Frog Peak, Innovac, Tempo Primo, EMF, SEAMUS, Sound Composers' Workshop labels. He currently serves on the Editorial Board of The
back, as an offshoot of my, both inspired by the story of Penelope, wife of Odysseus in Homer’s epic, the Odyssey. Penelope was left at home during the twenty-Trojan war, and then during his adventure-filled return voyage. Penelope needed a husband, and the gods remained silent. She would not take no for an answer until she finished weaving a shroud for her husband’s body. She was, in a sense, destined to live on without a husband until she finished the task, and she worked until she died. Her weaving was so skillful and her purpose so clear that she was considered a model of dedication.

The weaving and its reversal were musically inspired from a recording of local weaver Jane Russell, working on two wooden looms. I designed the weaver’s new sonic fabric, imprinted with the sounds of the looms.

The river Post and “exuberant and captivating” by the San Francisco Chronicle, explorations and inventive extensions of the tapestry. Her work ranges from acoustic to choral to orchestral. It is internationally performed, ranging from BAM’s City Requiem in New York, and across Europe, to Israel and Asia. Her music is widely known as Piping the Earth, released on Capstone Records (CPS 8727). Her music, Neuma, New World and Sonora labels. Her music has been commissioned by the American Composers Alliance, Core Ensemble, Kronos Quartet, National Symphony, and the European Arts, the last through Americans for the Arts. A two year retrospective of her works was performed at the Appalachian Center, and in concerts and festivals, major funding from the Lila Wallace-Readers Digest Arts Partners Program. Prés des Arts (France), Meshan Anaman (Israel), MacDowell, Yaddo and the Centaur, CRI, Neuma, New World and Sonora Records, Shattin’s music is a collection of Time Warner and Wendigo Music, the latter distributed by William R. Kenan, Jr. Professor of Music and Director of the Virginia Center for the Arts at the University of Virginia. Her teaching focuses on composition.

Of six, he was able to exchange jokes with his father in classical Greek. The tests with demonstrations of Johnny’s ability to memorize phone books. A guest book at random. Young Johnny read the column over a few times, then I answer any question put to him (who has number such and such?) or recite Johnny was the only student I ever afraid of. In the course of a lecture I gave he’d come to me as soon as the lecture was over, with the complete solution to the problem. Two things, von Neumann’s fame spread worldwide in the mathematical community and I found myself pointed out as a young genius. Von Neumann spent a lifetime working on automata theory. It represented for him a synthesis of his life’s work, during World War II and after, on large scale electronic computing mathematics as well as other sciences, automata theory was an ideal object. He brought to it many new insights and opened up at least two new areas. 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Sue Hettmasperger received B.F.A. and M.A. degrees from the University of New Mexico, and attended the Yale University Summer School in Art, 1971. Her exhibitions include one person shows at A.I.R. Gallery in New York (2007, 2003, 1999, 1994, 1990), where she has been affiliated since 1989. Other selected exhibition venues have included the Northern Arizona Museum of Art, Bowling Green University in Ohio, The University of Texas San Antonio Art Gallery, Artemisia Gallery, Chicago, the Hyde Park Art Center, Chicago, and numerous exhibits in galleries and museums across the country. She has received an Arts and Humanities Interdisciplinary Grant (2001), and the Faculty Scholar Award from the University of Iowa, (1997-1999); a National Endowment for the Arts Fellowship, (1983); as well as residency fellowships at the UCross Foundation (1992), Roswell Museum Artist in Residence Program, (1990 and 1975); and the MacDowell Colony, (1977). Included in numerous museum collections including the Art Institute of Chicago, the Metropolitan Museum of Art in New York, and the San Francisco Museum of Modern Art, she is currently a Professor of Painting and Drawing in the School of Art, University of Iowa.

**Faithfully Blind Followers to the Faithless** was conceived with the idea of creating a way to uniquely splice the worlds of acoustically derived music with the technologically driven plethora of tools available via analog and digital electronics, software, and programs. The source materials for this project include the Moog synthesizer, acoustic guitar, bass guitar, djembe, and trumpet, processed using Pro-Tools, Sound-Hack, and other programs to alter the signal I generated.

My name is Andrew Scott, and I have studied biology and science at the university here for the last 6 years, with my focus the last 3 years in the PharmD program. Throughout my collegiate experience I attempted to pursue my passion of the arts, particularly music, without much yield due to registration and scheduling limitations. I eventually deemed this goal inaccessible since my program dominated all available opportunities to take advantage of classes such as this one. Then during the spring of 2004, I was so compelled by the depth and magnitude of the sounds I heard at an electronic music concert, I immediately introduced myself and told Professor Fritts that I needed to take this class. I then promised myself that somehow I would manage to fit this class into my curriculum prior to graduation this next year. I had to wait patiently for 2 years, but the experience I've gained here is invaluable. My background of creating music is mostly in progressive rock, so I am still experimenting with the practically unlimited possibilities these studios offer, and plan to keep incorporating more and more of these techniques into my musical roots in the future.

**Junk DNA.** The double helix of DNA determines the development of all organisms, including humans and humpback whales, Tasmanian devils and ternips, fruit flies and finches. But 98.5% of that genetic code seems to serve no purpose. This part is called "junk DNA." I like the thought that so much of our essential nature is basically flotsam. So the piece you will hear is a somewhat jumbled, somewhat orderly sequence of brief motifs, repeated and overlapping to represent the many, many bits of DNA we don't use. Actually, there are two of these strands, one shorter spiraling counter-clockwise, the other longer spiraling clockwise, together making sounds strange enough to make Darwin scowl.

Dennis Hutchison has attended the University of Chicago, Florida State University, and the Freie Universität, Berlin. He has studied composition with Shulamit Ran, Ladislav Kubik, and most recently with Lawrence Fritts. Last year he was a visiting Assistant Professor at Grinnell College, he is currently a part-time lecturer at Cornell College.

**Oh I am so thirsty** is based on processing of sounds, which are taken from an audio recording of a recitation of the traditional Chinese poem Shi diao ge tou. Its title refers to a joke from the Jewish folklore — A young college professor is going on the train on his way to give a lecture in a distance city. Since he is unprepared for this lecture he is planning to use the time on the train for this purpose. He finds a place in an empty compartment, occupied only by an old Jewish man, and immediately starts to prepare the lecture. After five minutes the old Jewish man leans back in his sit and says — "Oh I am so... thirsty". Another five minutes past and the old man again — "Oh I am so... thirsty". After two more times the young professor, who could not concentrate on his lecture, brings the old man two cups of water. The old man drinks the water and thanked the professor. The professor sits back in his place, and now he is confident that he will be able to prepare his lecture. Ten minutes past the old man leans back again and says — "Oh I was... so thirsty".

Israel Neuman, from Tel-Aviv, Israel, is happily married with Yi Fang, (the voice on the recording), from Tianjin, China, and to present day does not understand a word in Chinese. He is a graduate student in the jazz studies area. He studies composition with Prof. Larry Fritts.