





Halpa, halvempi, ilmainen

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Sibelius-Akatemia

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TeknoDida, 2003

David Williams, Peter Webster
Experiencing Music Technology

Christopher Barlow,
Leeds College of Music

”

Music Technology Resourcing – The zero cost option”

Halpissofta-ryhmä

Mikko Virto

<http://www.mikkovirto.net/Tietismusa.htm>

TeknoDida, 2003

Musiikkiluokan kalustus

National Curriculum in Action

<http://www.ncaction.org.uk/subjects/music/ict-sft.htm>

- efektilaite, mikrofoni, vahvistin
- riittävä määrä tietokoneita, joissa on korkealuokkainen äänikortti
- ohjelmistoja, joiden avulla voi tutkia musiikin rakenteita ja tyyliä
- sekvensseri
- MIDI-koskettimistoja
- sämpläysohjelma

TeknoDida, 2003

Musiikkiluokan kalustus

National Curriculum in Action

<http://www.ncaction.org.uk/subjects/music/ict-sft.htm>

- 8- tai 16-kanavainen mikseri, kytkettynä tietokoneeseen ja digitaalisiin tehosteisiin
- PA-laitteisto
- nuotinkirjoitusohjelma
- neliraitanauhuri
- DJ-yksikkö
- kehittäviä työkaluja äänenkäsittelyyn
- karaokelaite

TeknoDida, 2003

Musiikkiluokan kalustus

National Curriculum in Action

<http://www.ncaction.org.uk/subjects/music/ict-sft.htm>

- CD:n polttoyksikkö
- minidisk ja stereomikrofoni
- parempi syntetisoija
- kehittynyt äänenkäsittelyohjelma
- dataprojektori
- Internet
- sähkö
- oppilaat

TeknoDida, 2003

Köyhän miehen versio

- halpissofta (shareware...)
- ilmaissofta
 - yhden miehen yrityksiä
 - mopoversio oikeasta ohjelmasta
 - ohjelman vanhempi versio

Köyhän miehen versio

Valmiina luokassa:

- tietokone
- äänikortti (MIDI-liittimet)
- mikrofoni
- kuulokkeet, kuulokehaaroitin
- (MIDI-soitin)

Ohjelmistotyypit

- MIDI-sekvensserit, tallentimet (DAW)
- silmukkaohjelmat, rumpukoneet
- softasynat
- opetusohjelmat
- nuotinkirjoitus
- karaoke
-

Musiikin elementit

Anvil Studio

The screenshot displays the Anvil Studio software interface. At the top, there is a menu bar with 'File', 'Edit', 'Track', 'View', 'Practice', 'Help', and 'Back'. Below the menu bar, a control panel includes a 'Time' display showing '0:03:21', a 'Cue' field with 'new' and 'delete' buttons, and a 'Duration' display showing '0:10:17'. There are also buttons for 'step', 'sync', and 'REC'. A large digital display on the right shows the time '0:03:21' in green. Below the control panel is a track list table:

Track Name	No.	Type	On	Device	Channel	Instrument	Vol	Pan	fx	T	1	2	3	4	5	6	7	8	9	10	12	14	16
Track 1	1	Instrument	on	General MIDI	1	Slap Bass 1			fx	T													
Track 2	2	Instrument	on	General MIDI	2	Acoustic Guitar(Ste			fx	T													
Track 3	3	Audio	on	ESS Allegro	Mono	new1_C.wav			fx	0													

Below the track list is a staff with a musical score. The score is in 4/4 time and features a bass line with various note values and rests. A blue rectangular selection box highlights a portion of the score. Below the staff is a control panel with the following options:

- Key: C Major
- Time: 4/4
- Show: 32nd notes
- Style: Bass
- Insert Mode (checked)
- Dotted Note
- Triplet Note
- Staccato
- Lock score
- Harmonize
- Include 7th Chords
- Vol: 77

At the bottom of the interface is a MIDI keyboard with a red brick background. Several keys are highlighted with blue dots, indicating they are being played or recorded.

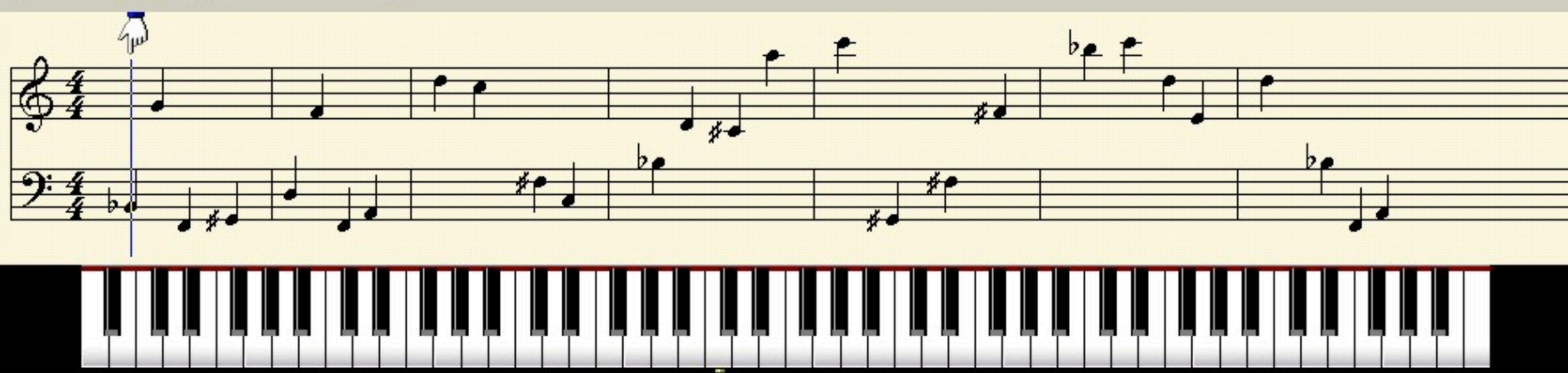
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Musiikin elementit

Anvil Studio

File View Practice Help Back

C G F D B E A All
 Accidentals Treble Bass



The screenshot shows the Anvil Studio interface. At the top is a menu bar with 'File', 'View', 'Practice', 'Help', and 'Back'. Below the menu bar are several checkboxes for note selection: C, G, F, D, B, E, A, All, Accidentals, Treble, and Bass. The main area displays a musical score in 4/4 time, consisting of two staves (treble and bass clef). A hand cursor is positioned over the first note on the treble staff. Below the score is a virtual piano keyboard with black and white keys. At the bottom, there is a text box with instructions: 'Either type the name of each note on the computer's keyboard, or Press the indicated keys on a synthesizer keyboard, or the piano keyboard drawn on the screen. Begin when you are ready, and answer as quickly as you can.'

Either type the name of each note on the computer's keyboard, or
Press the indicated keys on a synthesizer keyboard, or the piano keyboard drawn on the screen.
Begin when you are ready, and answer as quickly as you can.

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Musiikin elementit

Trainer

Triad Trainer
Copyright © 2000-2001, Ricci Adams

1	1	50
Correct	Incorrect	Percent

Major Minor
Augmented Diminished

New Triad
Root Accidentals
Inversions
Toggle Helpers
Reset Score

Return to Main Menu

Key Trainer
Copyright © 2000-2001, Ricci Adams

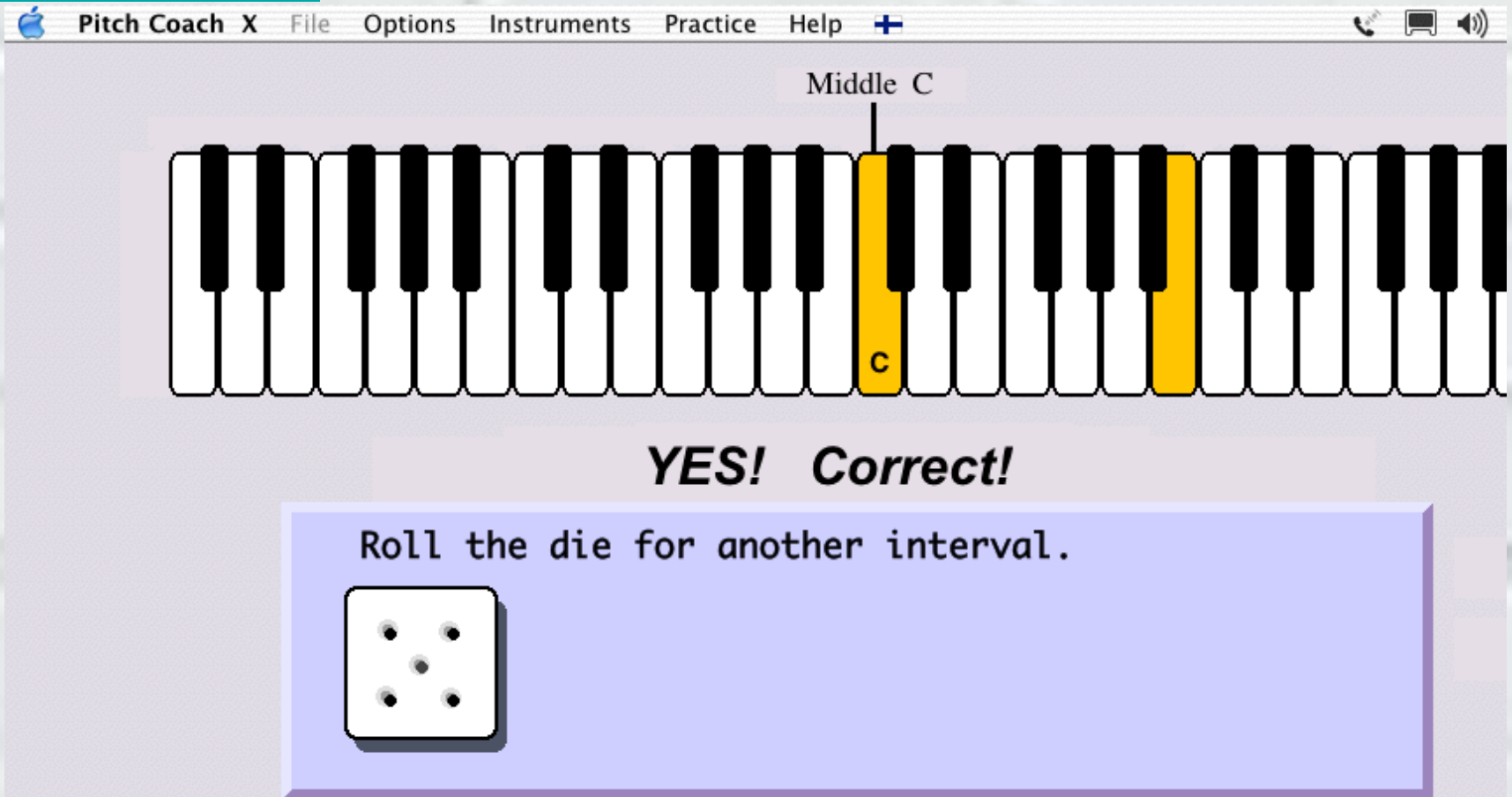
0	0	0
Correct	Incorrect	Percent

New Key
Max. Accidentals
Toggle Helpers
Major / Minor
Reset Score

Return to Main Menu

Musiikin elementit

Pitch Coach



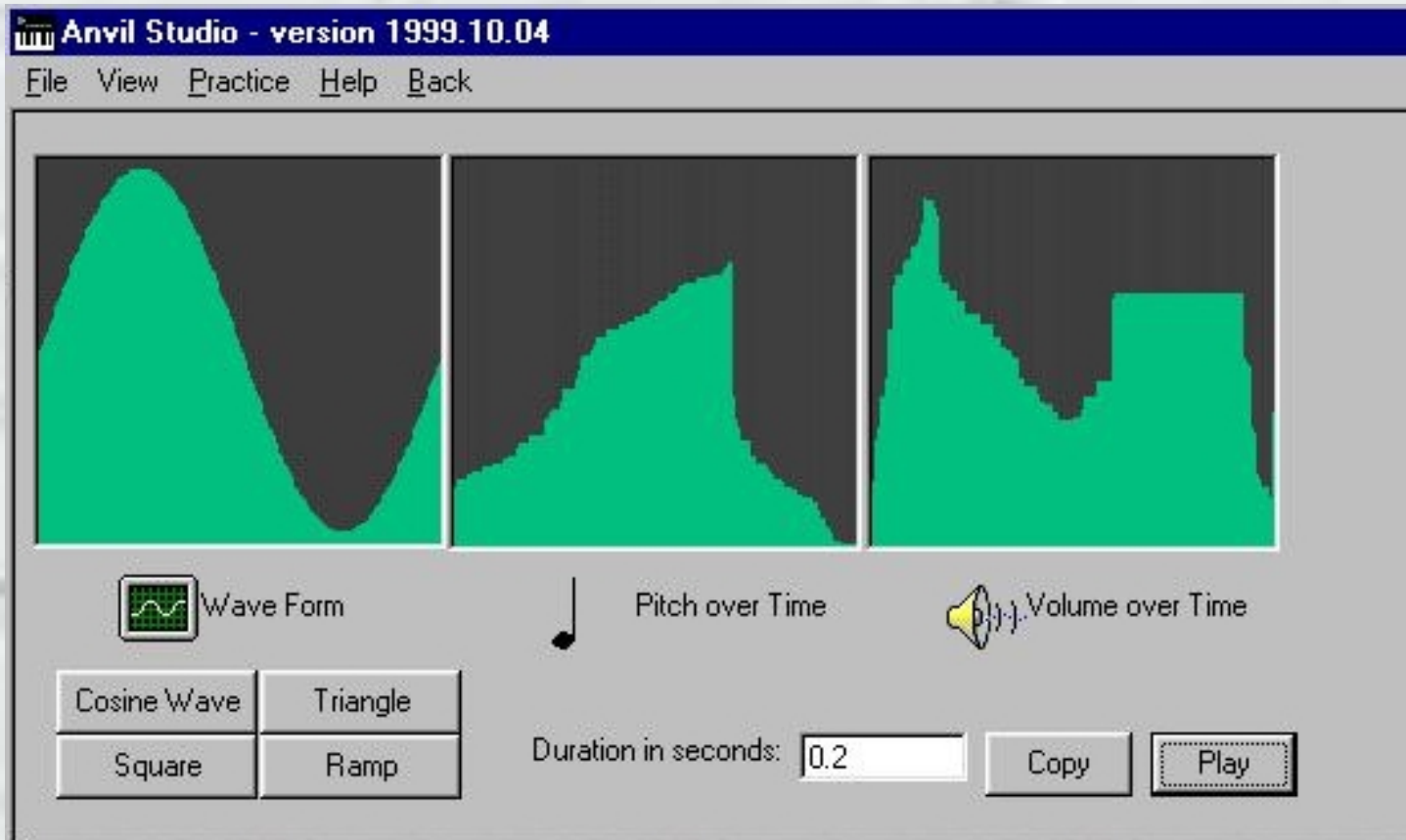
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Äänimaisema, -synteesi

- *Anvil Studio*: yksinkertainen aaltomuotosynteesi
- *Coagula*: summaava synteesi
- *SimSynth*: vähentävä synteesi

Äänimaisema, -synteesi

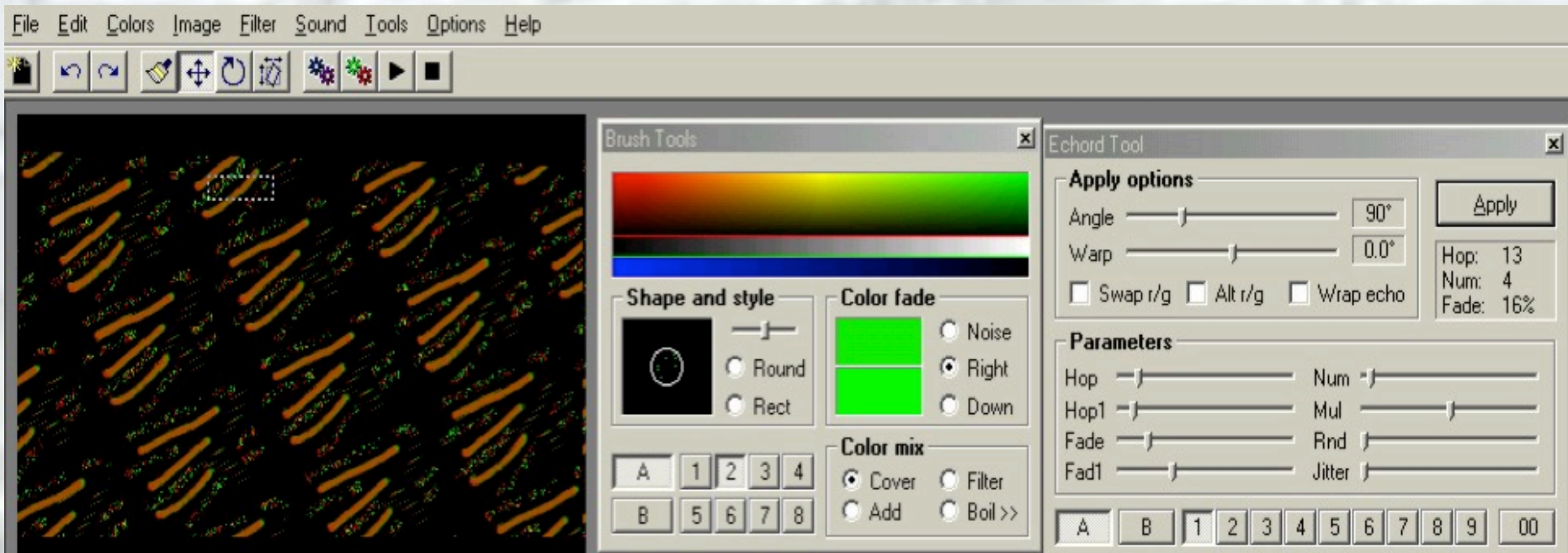
Anvil Lab



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Äänimaisema, -synteesi

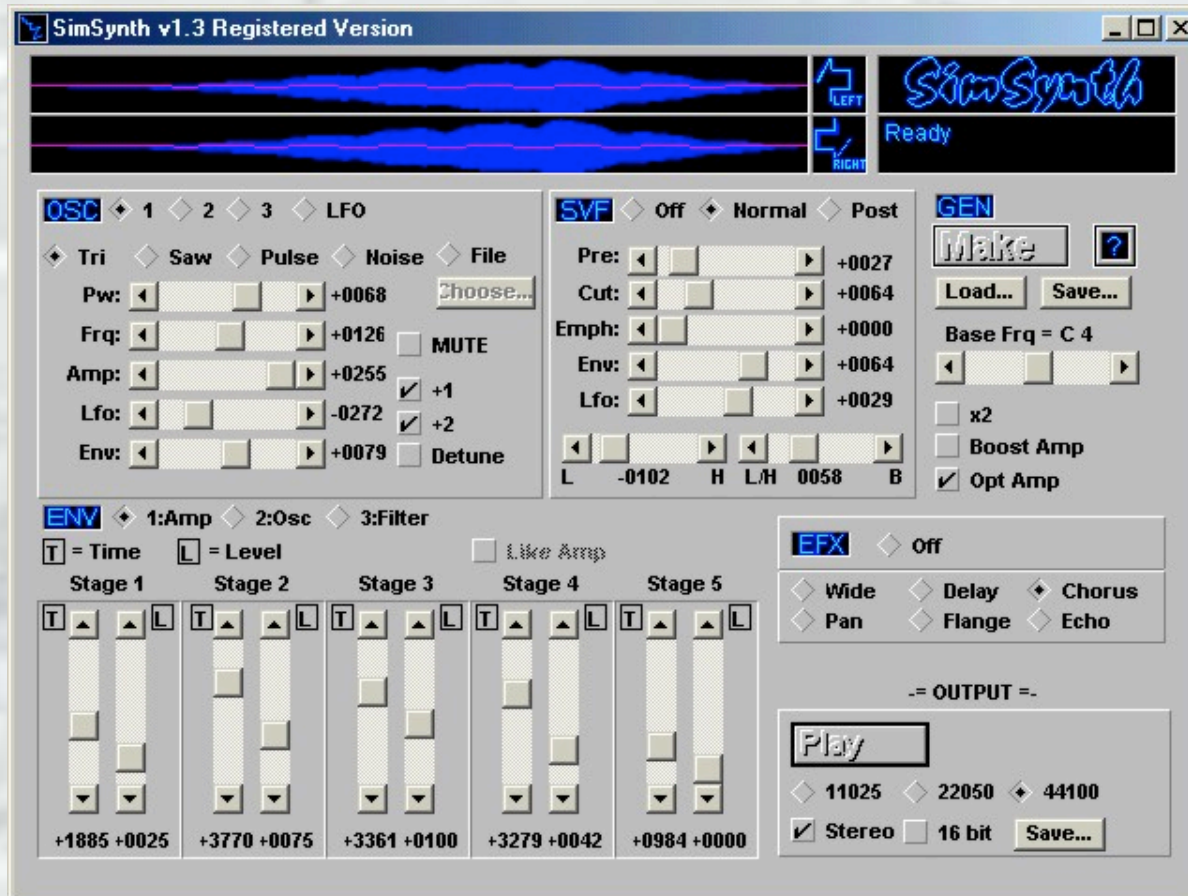
Coagula



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Äänimaisema, -synteesi

Sim Synth



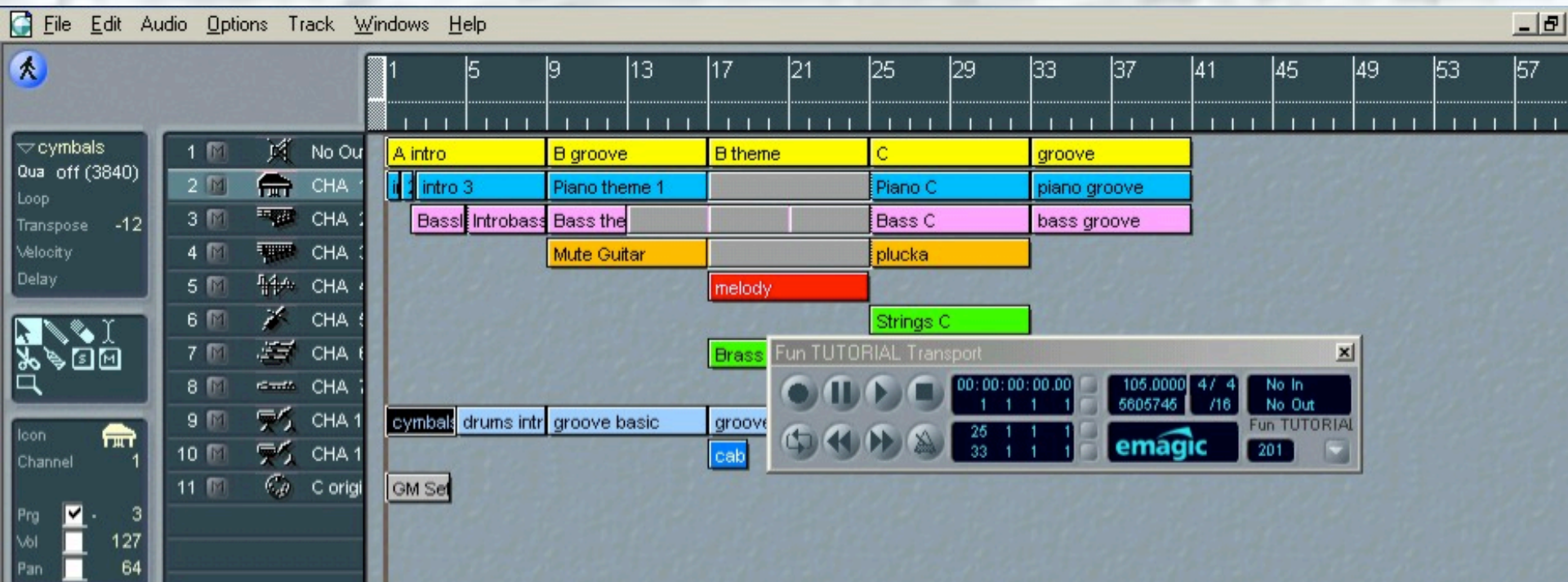
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Äänen tallennus ja muokkaus

- Anvil studio: 1 audioraita, 16 MIDI-raita
- Logic Fun: 16 audio, ∞ MIDI
- ProTools Free: 8 audio, 48 MIDI
- Audacity: ∞ audio, ei MIDI
-

Äänen tallennus ja muokkaus

Logic Fun



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Äänen tallennus ja muokkaus

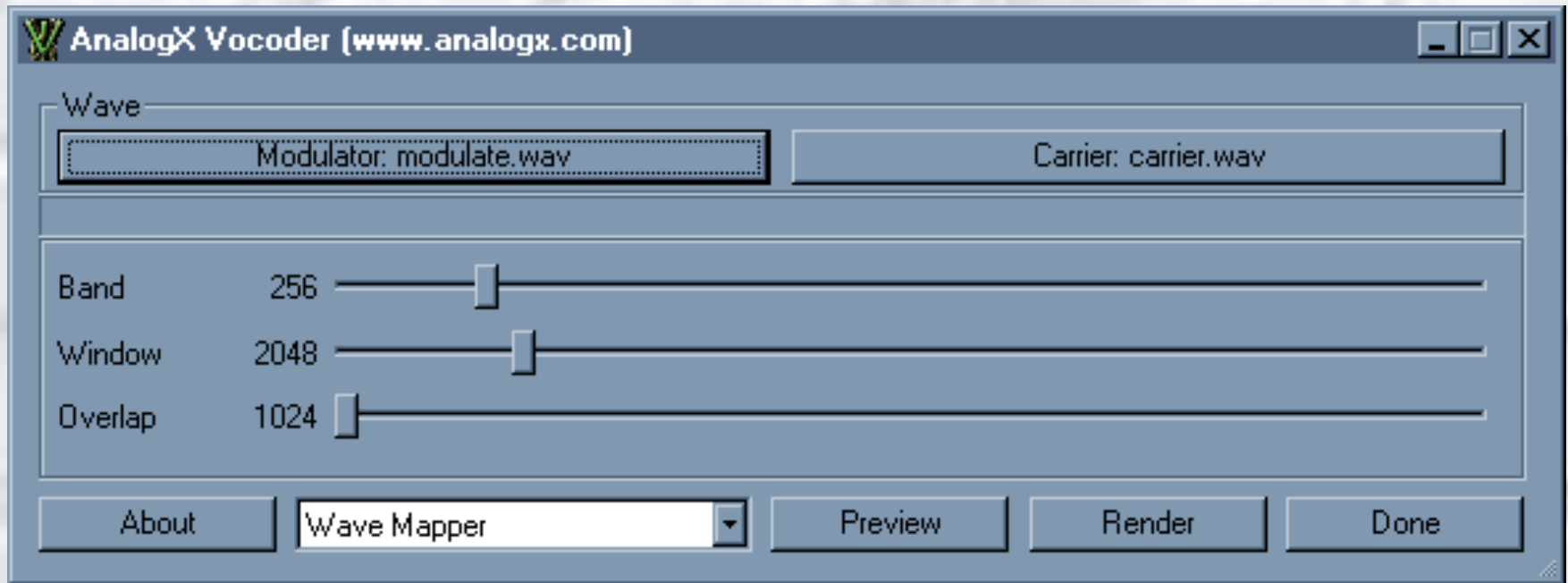
ProTools Free



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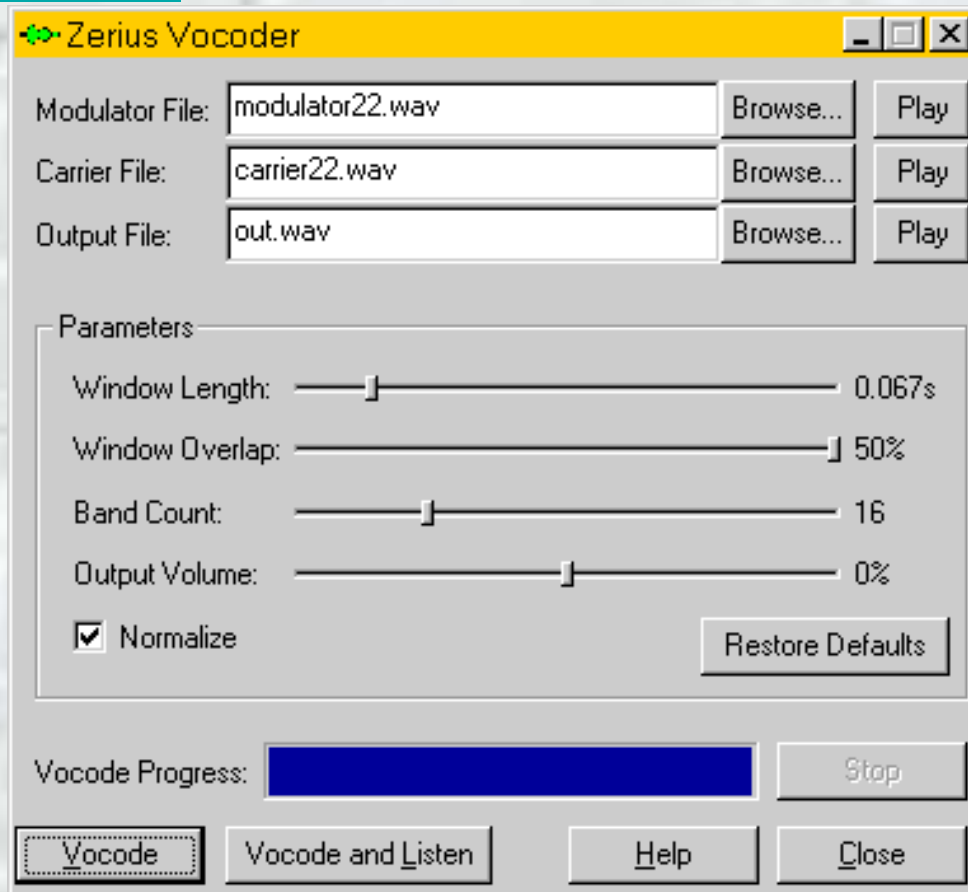
Ääntä ja looppeja

AnalogX Vocoder



Ääntä ja looppeja

Zerius Vocoder



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Ääntä ja looppeja

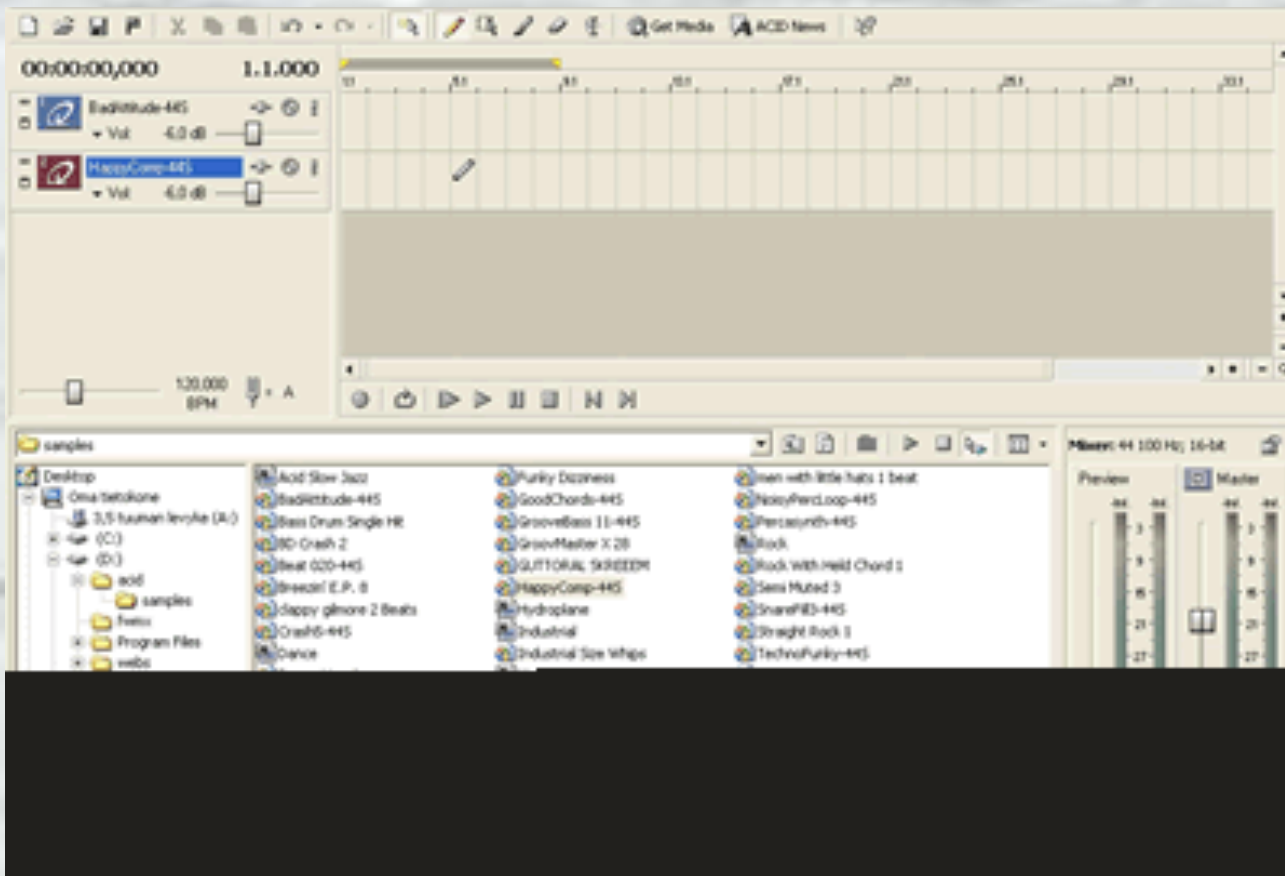
Hammerhead Rhythm



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Ääntä ja looppeja

ACIDXpress



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Nuotinkirjoitus

Finale NotePad

The screenshot displays the Finale NotePad software interface. At the top, the menu bar includes File, Edit, View, Options, Trade-up, Window, Simple, and Ohje. Below the menu is a toolbar with various musical notation tools. To the right of the toolbar is the Playback Controls section, which includes buttons for play, stop, and other playback functions, along with fields for Measure (set to 1) and Tempo. The main workspace contains a music score with three staves: Voice, Flute, and Mandolin. The Voice staff has a treble clef and a key signature of two flats (B-flat and E-flat). The first measure of the Voice staff contains a sequence of notes: a quarter note G4, an eighth note A4, an eighth note B4, a quarter note C5, and a quarter note B4. The Flute and Mandolin staves are currently empty. The interface also features a status bar at the bottom of the workspace that reads "EIGHTH NOTE: Click the staff to place an eighth note. (Shortcut: '4')".

File Edit View Options Trade-up Window Simple Ohje

Playback Controls

Measure: 1 Tempo:

Untitled #1

EIGHTH NOTE: Click the staff to place an eighth note. (Shortcut: '4')

[Title] [Composer]

Voice

Flute

Mandolin

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