ABJAD:

AN OPEN-SOURCE SOFTWARE SYSTEM FOR FORMALIZED SCORE CONTROL

Introductory Workshop

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Study Day on Computer Simulation of Musical Creativity
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INTRODUCTION

The Abjad API for Formalized Score Control extends the Python programming language with an open-source, object-oriented model of common-practice music notation that enables composers to build scores through the aggregation of elemental notation objects.

RHYTHM MAKERS

ABJAD?

CODE STATISTICS

- 496 public classes
- 387 public functions
- 186,963 lines of code
- 9399 unit tests
- 10190 documentation tests

HISTORY

- C into Finale via MIDI (1997)
- Mathematica into Sibelius via MIDI (2001)
- Mathematica into SCORE (2003)
- Mathematica into LilyPond (2004)
- Python into Adobe Illustrator (2004)
- Python into LilyPond (2005)
- Max/MSP into MS Access into Adobe Illustrator (2008)[1]
- Public release on GoogleCode (2008)
- Migration to GitHub (2011)
- Abjad 2.16 released (2015)

[1] An attempt by Josiah before discovering Abjad.

Table 1: Abjad Software Stack

Python				
Abjad				
~~Score~~	LilyPond	Steinberg?	...	...

SCORE APPLICATIONS

Josiah's music

2015 **Invisible Cities (iii): Ersilia**
for chamber orchestra

2015 **Invisible Cities (ii): Armilla**
for viola duet

2014 **Invisible Cities (i): Zaira**
for eight players

2014 **Plague Water**
for bari sax, e-guitar, piano and percussion

2011 **Aurora**
for string orchestra

2010 **Lagartija**
for mixed quartet

JEFF'S MUSIC

Trevor's Music

OTHER COMPOSERS

NON-SCORE APPLICATIONS

IPYTHON

CONCLUSION

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