## Sebastien Vasey's Projects

Here are some things I have worked (or am currently working) on.

### 1 Projects done at EPFL

• My bachelor thesis, Synthesis for Rational Linear Arithmetic<sup>1</sup> investigates synthesis of code fragments from specifications written in the language of linear rational arithmetic.

#### 2 System administration programs

I occasionally enjoy writing software to automate some non-trivial system administration tasks. These should work on any UNIX-like OS.

- Darwrap<sup>2</sup> is a backup program using Dar<sup>3</sup>, implementing differential backup, automated restoration, cryptographic signing, encryption, and some other things. This is what I use to backup all my data.
- Urpkg<sup>4</sup> lets you install programs directly from source in a safe and undoable way.

#### 3 Game programs

I like devising strategies for obscure board games, and then implement them. Here are two of my creations (joint work with Yann Schoenenberger) .

- Kinonk<sup>5</sup> is a Pentominoes<sup>6</sup> engine written in C++.
- Deep Pink<sup>7</sup> is a Connect 5 (Gomoku<sup>8</sup>) engine written in C++.

#### 4 Software usage notes

• How to do X with program Y<sup>9</sup>: Notes to myself, most often giving the exact command line invocation to do something special with a given software. Maybe they can be useful to somebody else...

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<sup>1</sup>http://svasey.org/projects/synthesis-rla/index_en.html
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<sup>&</sup>lt;sup>2</sup>http://svasey.org/projects/darwrap\_en.html

<sup>3</sup>http://dar.linux.free.fr/

<sup>4</sup>http://svasey.org/projects/urpkg/index\_en.html

<sup>5</sup>http://kinonk.sourceforge.net

<sup>6</sup>http://en.wikipedia.org/wiki/Pentominoes

<sup>7</sup>http://svasey.org/projects/deeppink\_en.html

<sup>8</sup>http://en.wikipedia.org/wiki/Gomoku

 $<sup>^9 {</sup>m http://svasey.org/projects/software-usage-notes/index\_en.html}$ 

# 5 Various

• Old stuff<sup>10</sup>: Things I have worked on, and published here at some point, but now do not regard as especially interesting or inspiring.

<sup>10</sup>http://svasey.org/projects/old-stuff/index\_en.html