

Translating Chalice into SIL

Bachelor's Thesis

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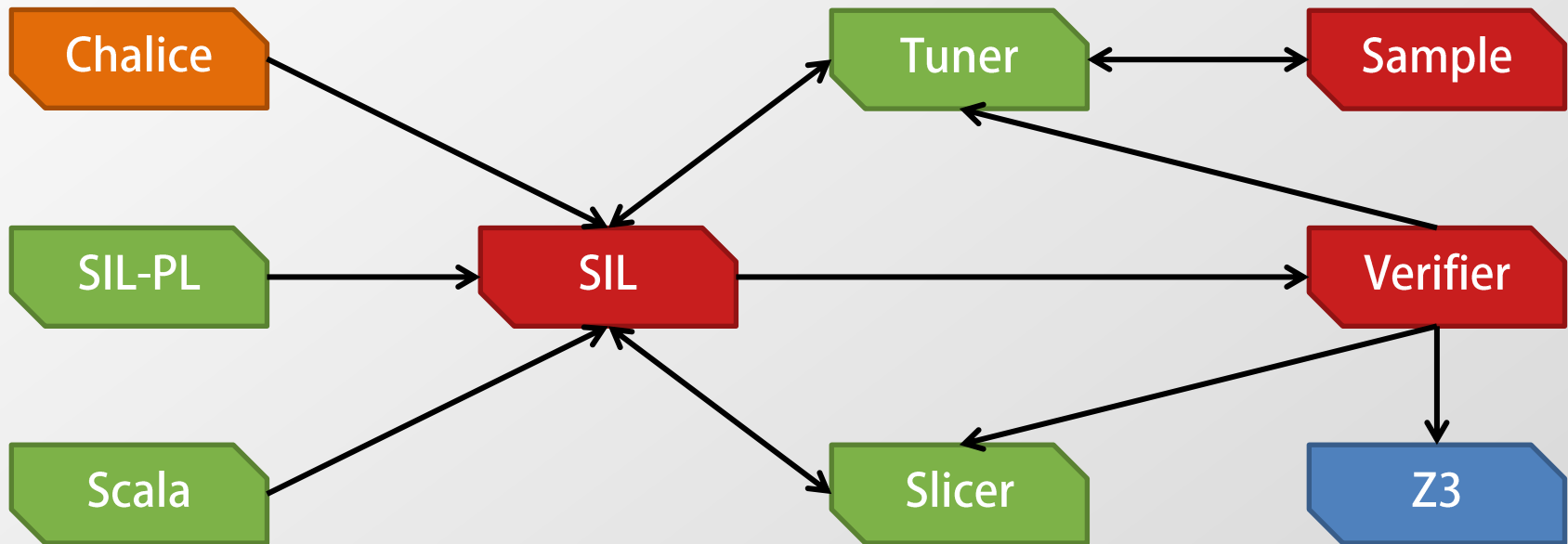
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The Semper Project

- Long term project
- Automatic program verifier for Scala
 - verify concurrent programs
 - reduce annotation overhead
 - deal with functional features (e.g., closures)



Semper Architecture Design



Chalice

SIL

```
method n()  
  requires rd(this.f)  
  ensures  rd(this.f)  
{  
  ...  
}  
  
...  
{  
  call n();  
}
```

«Inhale/Exhale»

```
method n() ...  
{  
  inhale rd(this.f);  
  ...  
  exhale rd(this.f);  
}  
  
...  
{  
  exhale rd(this.f);  
  inhale rd(this.f);  
}
```

Thank you

QUESTIONS?