

Writing the thesis

- ✍ Introduction:
 - ✗ Actual introduction
 - ✓ Scientific motivation
- ✍ Programmable photonics:
 - ✓ Basics of photonic processor
 - ✍ Components
 - ✍ Meshes
 - ✍ Circuit representation
 - ✓ Feedforward approximation
- ✗ Difficulties
 - ✗ Programming of photonic processors
 - ✗ Translation of intent
 - ✗ The PHÔS programming language
 - ✗ Example of photonic circuits
 - ✗ Simulation
 - ✗ Future work
 - ✗ Conclusion

Design and architecture

- ✓ Language design: grammar & semantics
- 📁 Constraint solver
- ✓ Compiler architecture:
 - ✓ Parser (fully implemented)
 - ✓ AST (fully implemented)
 - ✓ Code formatting (partially implemented)
 - ✓ Type checking
- 📁 AST to HIR
- 📁 HIR to MIR
- 📁 MIR to bytecode
- 📁 Bytecode VM
- ✓ Marshalling layer
- ✓ HAL layer generation
- ✓
- ✗ Place and route