Lab Course Motion Planning

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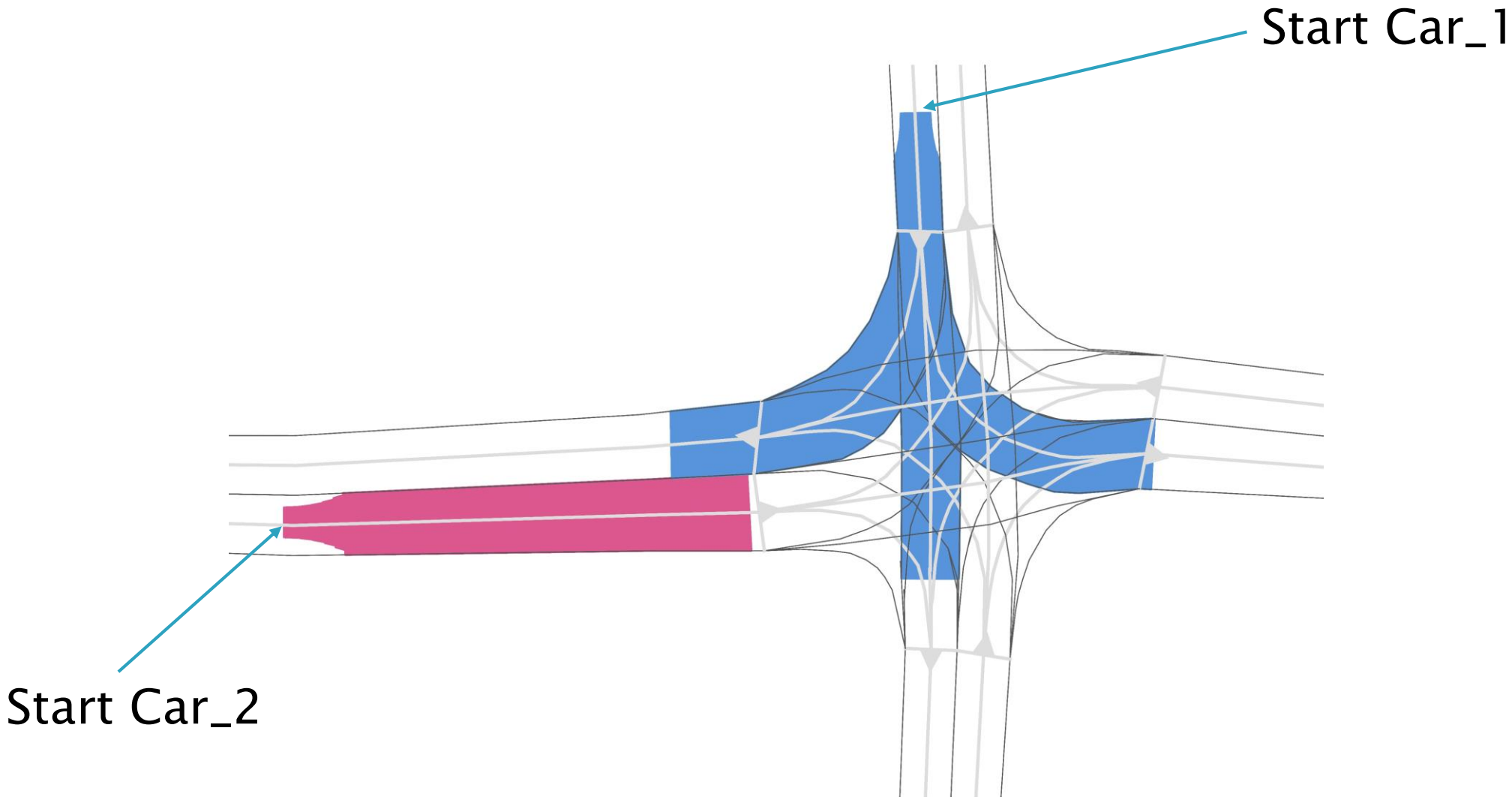
Recap



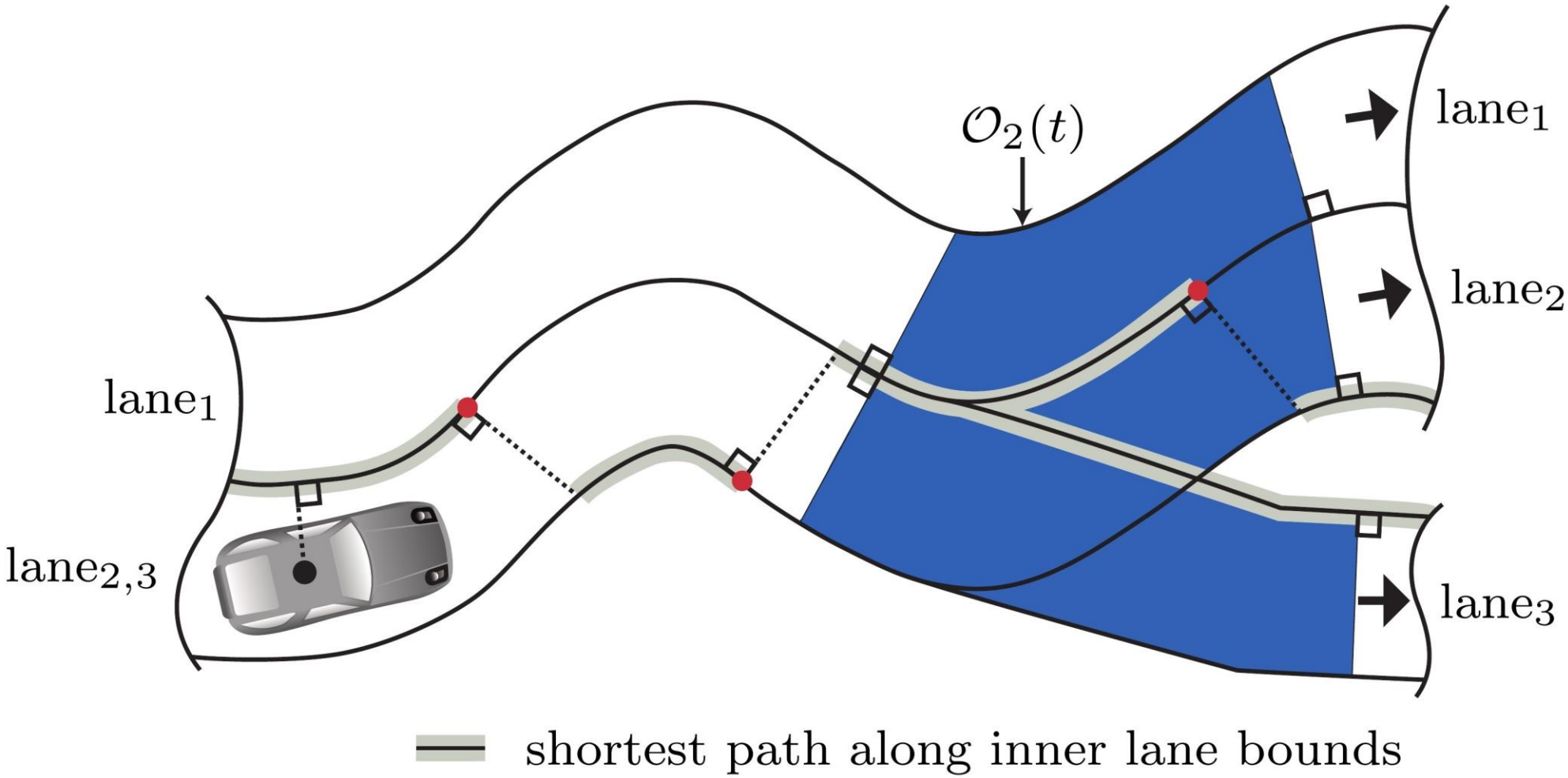
Scenario: GER_Ffb_1

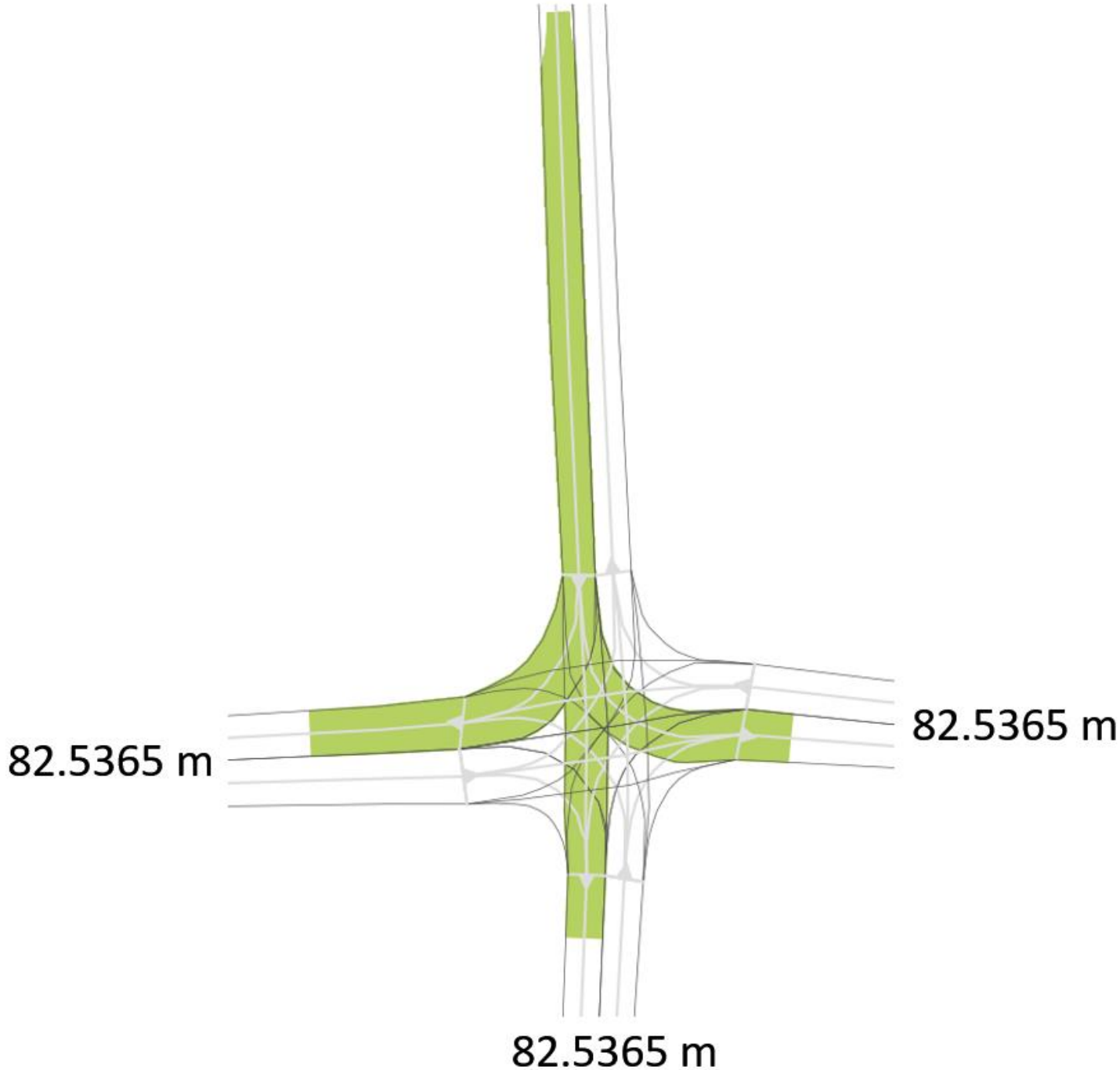
Agenda

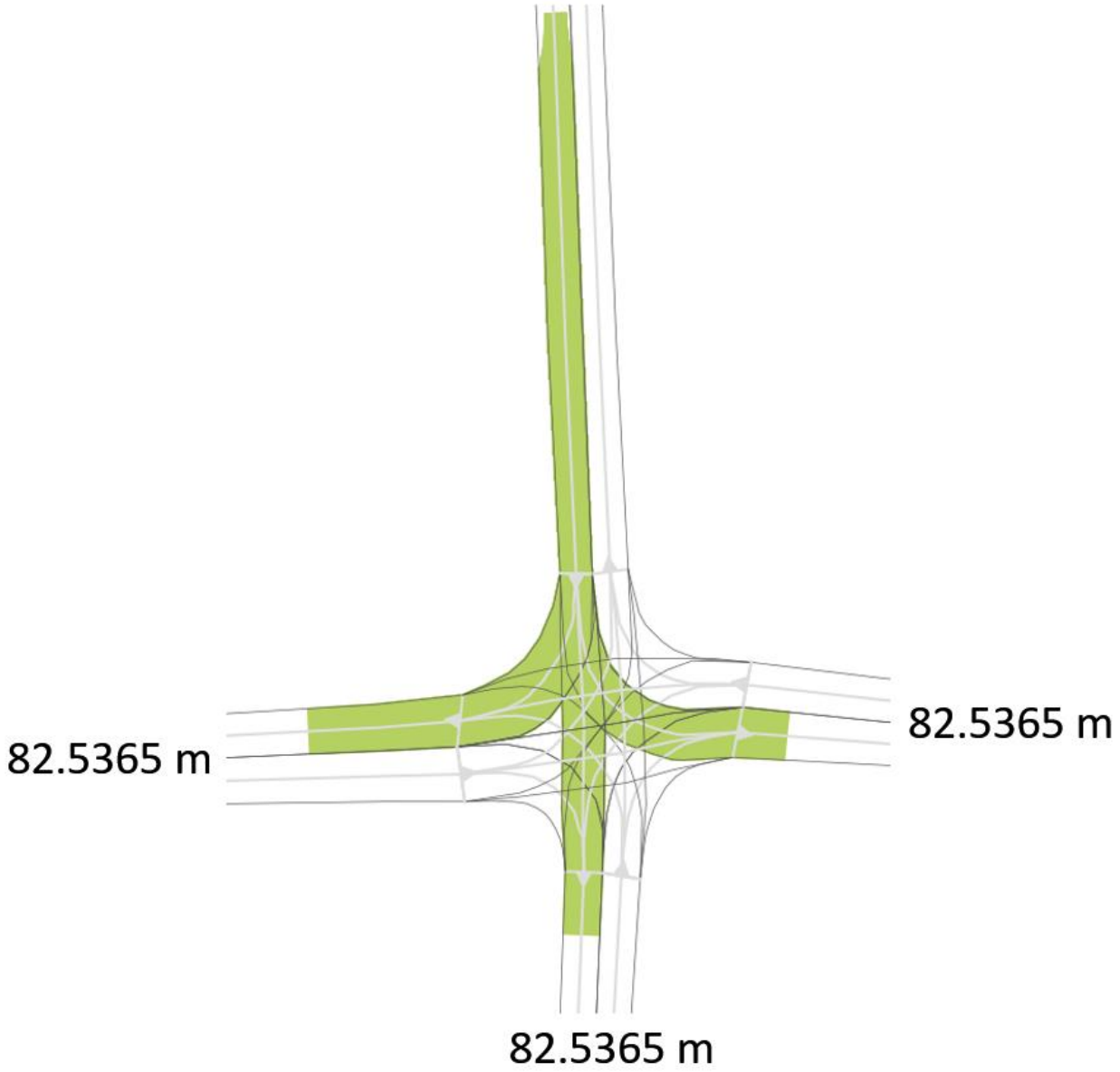
1. Shrink occupancies by maximum feasible velocity
2. Interface to Python
3. Future Work

Maximum Feasible Velocity

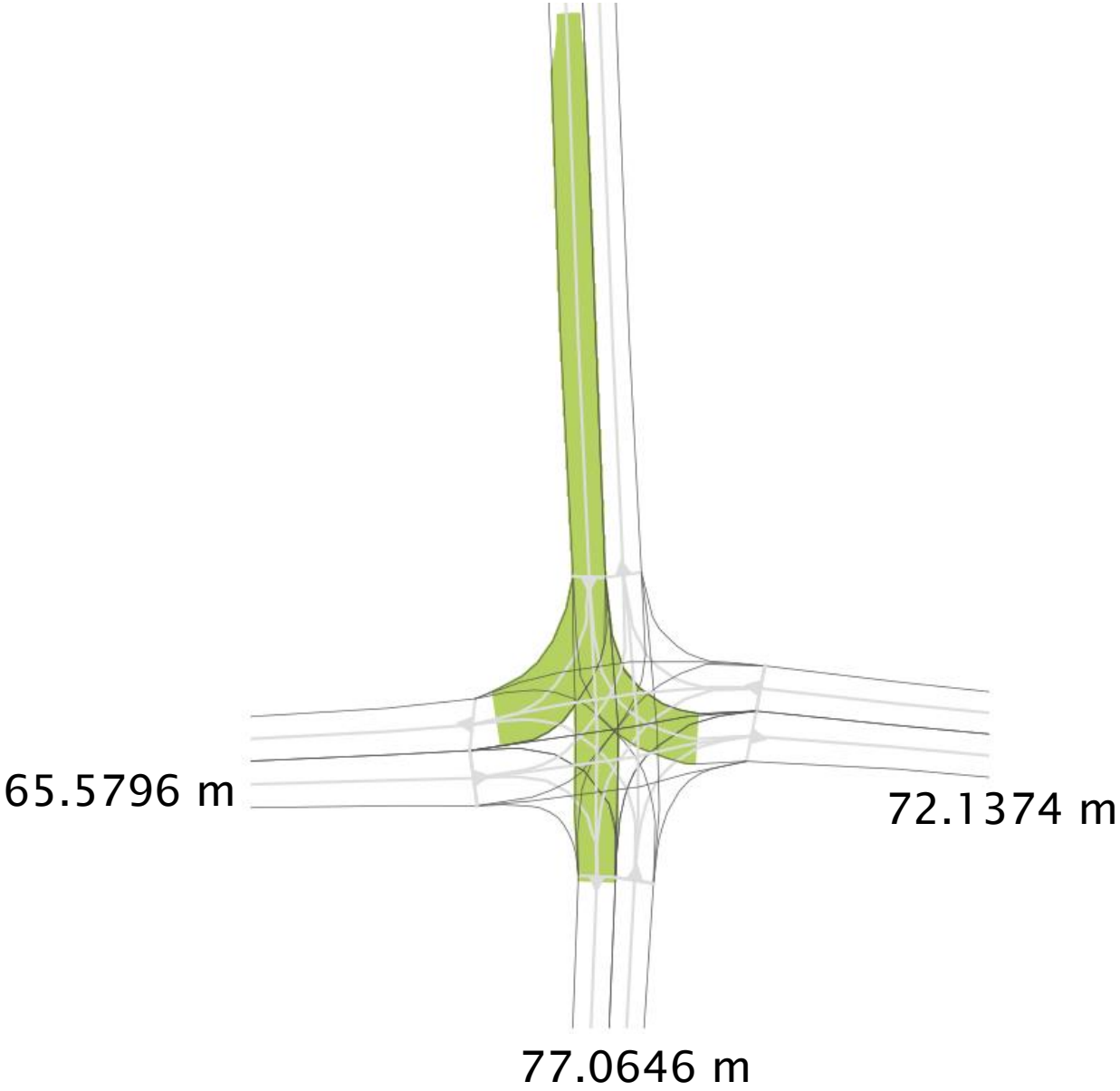
Lane-Following Occupancy (M2)




82.5365 m
82.5365 m
82.5365 m



Old

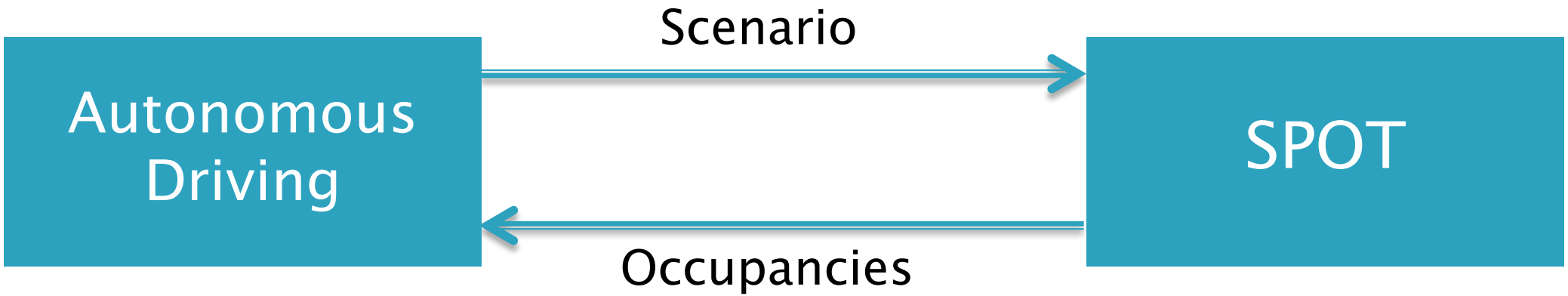


New

Interface to Python

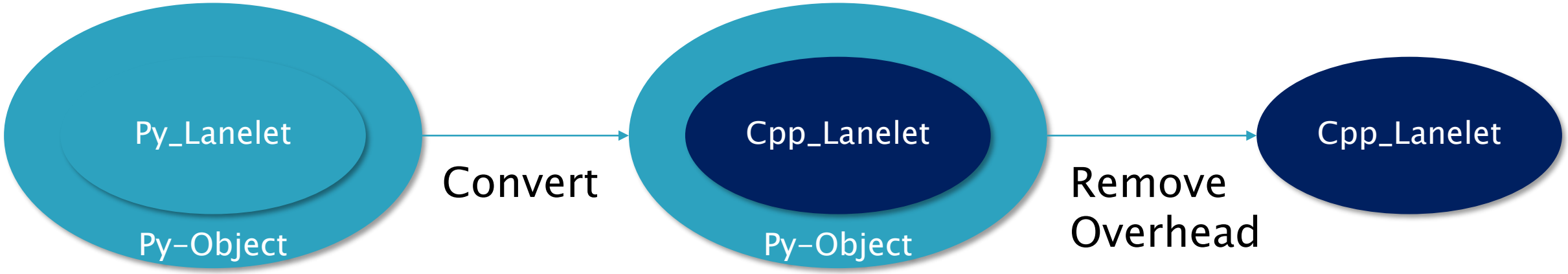
Motivation

- Connect SPOT to autonomous driving framework

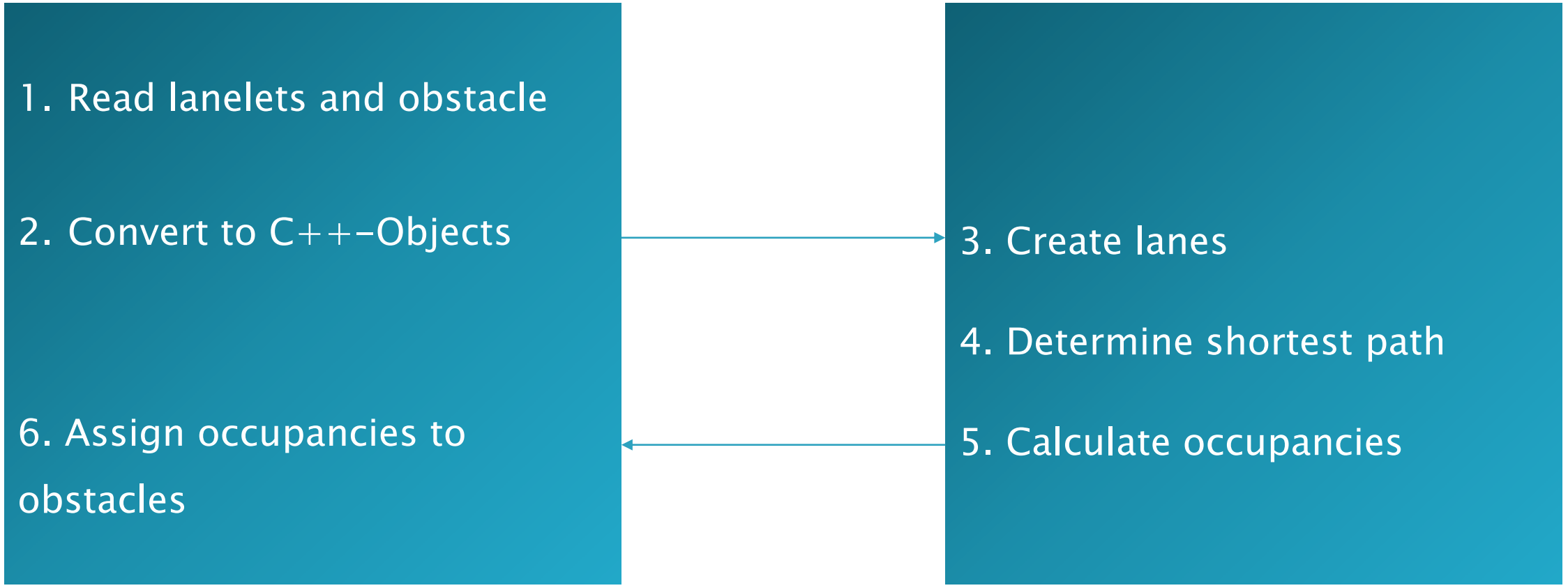


Pybind11

- Expose C++ types in Python and vice versa



Model



Python – Autonomous Driving

C++ – SPOT

Usage

- Calculate occupancies:

```
>> SpotPrediction.calcOccupancies(scenario, timeHorizon)
```

- Call unit tests:

```
>> runUnittests()
```

Future Work

- Calculate racing line
- Pedestrian prediction