**How to Run - CVRP Solver**

**Requirements**

* Python 3.8+
* Install packages: pip install numpy matplotlib requests

**Quick Start**

**Step 1: Download Data**

python download\_instances.py

**Step 2: Run Experiments**

python run\_experiments.py

**Runtime:** ~2-3 hours for all instances

**What You Get**

**Files Created:**

* experiment\_results.json - All numerical results
* plots/instances/ - Instance maps
* plots/solutions/ - Best solutions with routes
* plots/comparisons/ - Performance charts

**Quick Test (5 minutes)**

Edit run\_experiments.py to only test small instances:

instance\_files = [

"instances/P-n16-k8.vrp",

"instances/E-n22-k4.vrp"

]

**Troubleshooting**

* **Import error:** pip install numpy matplotlib requests
* **Download fails:** Check internet connection
* **Takes too long:** Use quick test above

That's it! Run the two commands and check the plots/ folder for results.