
Lumache

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MPTO or Multiphase topological optimization is a simulation technique based on the principle of the finite element method that allows to determine the optimal distribution of two or more different materials in combination under thermal and mechanical loads.

Master's thesis on the optimization of material distributions in mechanically loaded multi-material components using simulated annealing and evolutionary algorithms.

Check out the [Usage](#) section for further information, including how to [Installation](#) the project.

Note: This project is under active development.

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1.1 Usage

1.1.1 Installation

To use Lumache, first install it using pip:

```
(.venv) $ pip install lumache
```

1.1.2 Creating recipes

To retrieve a list of random ingredients, you can use the `lumache.get_random_ingredients()` function:

The `kind` parameter should be either "meat", "fish", or "veggies". Otherwise, `lumache.get_random_ingredients()` will raise an exception.

For example:

```
>>> import lumache
>>> lumache.get_random_ingredients()
['shells', 'gorgonzola', 'parsley']
```

1.2 API
