

Nico Gerard Pierson

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Los Angeles, CA

[Portfolio](#)

[Linkedin](#)

[GitHub](#)

[AngelList](#)

Technologies

React.js, Redux, Express, JavaScript, Python, Matlab, Bash and Shell Scripting, HTML5, CSS3, Mocha, Pytest, SQL, postgresSQL, Sequelize, Flask, SQLAlchemy, AWS, Heroku, Docker, HPC

Projects

Unwined - A wine rating App that allows users to discover and comment on wines.

[live site](#) | [github](#)

HTML5 , JavaScript , CSS3 , React, Redux, Express, Sequelize, postgresSQL

- Curated wine json data in sequelize to seed database with 5000+ wines, 3000+ wineries, and 300+ wine types.
- Implemented search feature with search query to filter results based on name, rating, price and/or country.
- Reduced response time by normalizing wines and wineries in the redux store, by dispatching actions for each wine page, and grabbing only the associated wineries.

Hotpotato - A recipe portfolio App to find new recipes and add their own.

[live site](#) | [github](#)

HTML5 , JavaScript , Python, CSS3 , React, Redux, Flask, SQLAlchemy, postgresSQL

- Integrated recipe json data from spoontacular API to seed the database with 100+ recipes.
- Designed a many-to-many Follows helper table, and created model methods to add or remove a follower.
- Leveraged React/Redux state to conditionally render/save multiple rows of recipe direction and preparation steps with a single dispatch..
- Coordinated tasks and deadlines with a 4-member team using the Agile Framework and github issues.

YourCity - A city matching App for users who plan on traveling or moving.

[live site](#) | [github](#)

HTML5 , JavaScript , Python, CSS3 , React, Redux, Flask, SQLAlchemy, postgresSQL

- Designed fully responsive CSS media queries for small mobile devices, tablets and computer screens.
- Developed app using github issues and the Agile Framework with a git feature workflow and a staging branch.
- Integrated heroku pipeline with github actions for staging and production environments.

Experience

Entry-Level Lab Technician | May 2018 - September 2018

Molecular Express Inc.

- Reported analysis of experimental results

Research Lab Technician | September 2018 - April 2021

California Institute of Technology

Matlab, Python, Bash and Shell Scripting, HPC

- Revamped image processing pipeline to handle noisy tissue datasets.
- Completed targeted deadlines and delivered datasets to the Human Atlas Biomolecular Program (HuBMAP).
- Established a segmentation group and outlined meeting agenda for HuBMAP groups.
- Developed bash and shell scripts to parallelize with the High Performance Cluster
- Collaborated and customized Matlab and Python image processing pipelines for PhD students.
- Co-authored 5 publications for the most prominent scientific journals

Education

App Academy | April 2021 - September 2021 | Online

Immersive 1000+ hour software development course with focus on full stack web development

University of California Santa Cruz | September 2008 - June 2012 | Santa Cruz, CA

BS of Bioengineering

Publications

- Kiim, D., et al. (2019). Multimodal Analysis of Cell Types in a Hypothalamic Node Controlling Social Behavior. [Cell](#). 179(3):713-728.e17. DOI: [10.1016/j.cell.2019.09.020](#)
- Takei, Y., et al. (2020). Global architecture of the nucleus in single cells by DNA seqFISH+ and multiplexed immunofluorescence. bioRxiv. 2020.11.29.403055. DOI: [10.1101/2020.11.29.403055](#)
- Dries, R., et al. (2021). Giotto: a toolbox for integrative analysis and visualization of spatial expression data. [Genome Biology](#). 22(1). DOI: [10.1186/s13059-021-02286-2](#)
- Takei, Y., et al. (2021). Integrated spatial genomics in tissues reveals invariant and cell type dependent nuclear architecture. bioRxiv. 2021.04.26.441547. DOI: [10.1101/2021.04.26.441547](#)
- Takei, Y., et al. (2021). Integrated spatial genomics reveals global architecture of single nuclei. [Nature](#) 590(7845):1-7. DOI: [10.1038/s41586-020-03](#)