Joy Pasquet

Address: 116 Beulah Street. 94117 San Francisco, CA, United States
Tel: +1 (510) 735 5745
E-mail : joy_pasquet@berkeley.edu
Portfolio : https://www.ocf.berkeley.edu/~joypasquet/portfolio/

City Planner | Engineer | Geospatial Analyst

Education

2017-2019	MASTER OF CITY PLANNING	University of California, Berkeley	CA, USA

Concentration: Transportation Policy and Planning.
Scholarship: Fulbright Foreign Student Program, French-American Fulbright Commission.

2013-2017	M.SC. IN SCIENCE AND EXECUTIVE ENGINEERING	MINES ParisTech	France

Concentration: Public Affairs and Innovation.

Work experience

2019-2020	URBAN PLANNING ANALYST	Uber – JUMP Bikes	CA, USA

Leveraged urban planning expertise and geospatial analytics to support JUMP operations and expansion globally.
- Conducted geospatial analyses combining internal and open source data on 20 cities across 11 countries.
- Collaborated with Market Entry, Launch, Policy and Operations teams on expanding JUMP globally by designing new system areas, identifying deployment locations, and producing ad-hoc visualizations for dockless bike and scooter permits in 8 cities.
- Developed a methodology to recommend adequate locations for micromobility parking investments and collaborated with Policy teams to share recommendations with policy-makers in 6 cities.

2018	TRANSIT PERFORMANCE ANALYST	San Francisco Municipal Transportation Agency	CA, USA

Analyzed transit-related operational metrics.
- Analysis of automatic passenger count data for the National Transit Database ridership validation report, using Stata and Excel;
- Compiling of rail annual ridership figures for light-rail and streetcar lines and of the decennial ridership baseline for cable cars for the National Transit Database, using Tableau, Stata and Excel;
- Analysis of cable car time performance using Stata and Excel, and briefing of management.

2017	TRANSPORTATION ENGINEER	Setec international	France

Conducted the socio-economic evaluation of a new high-speed rail line in France.
- Data research and analysis for the socio-economic diagnostic, using Excel and VBA;
- Drafting of an academic article laying out a retrospective analysis of high-speed rail transport supply;
- Preparation of the travel supply and demand components of the railway appraisal.

2015-2016	TRANSPORTATION ANALYST	The World Bank – Transport and ICT Global Practice	DC, USA

Managed transport investment projects in Sub-Saharan Africa.
- Technical support in project management (review of procurement documents, drafting of memoranda of understanding, data research and analysis, financial and economic analysis, reporting) both for projects under preparation and implementation;
- On-site project supervision (field visits, meetings with local government officials and project stakeholders) in Cameroon and Democratic Republic of Congo.

Research experience

2017-present	GRADUATE STUDENT RESEARCHER	University of California, Berkeley – SafeTREC	CA, USA

Developing a proactive approach to road safety.
- Cross-sectional analysis of traffic crash data from the Highway Safety Information System to develop a profile of high-risk road facilities in 7 states, using Python, Excel and ArcGIS;
- Analysis of bicycle crash data on the Caltrans road network to prioritize high-risk road facilities for safety improvements, using Excel and VBA;
- Recommendations to the City of San Diego on priority systemic hotspots to target and safety engineering countermeasures to implement.

2014-2015	GRADUATE STUDENT RESEARCHER	École des Ponts ParisTech – LVMT	France

Developed parking supply and demand predictions by 2030 for a future Grand Paris Express station.
- Diagnostic of the eco-district around the future metro station, using Excel and TransCAD;
- Sizing of a park-and-ride facility through long-term transport demand scenario building and simulations.

Skills

Languages	Native speaker	French
	Fluent	English, German, Spanish
Software	General	Microsoft Office, Tableau
	Geographic Information System	QGIS, ArcGIS, TransCAD, CartoDB
	Programming	Python, SQL, Stata, VBA, Java
	Graphics and design	Adobe Suite, Catia, SolidWorks

Extra-curricular activities

Student involvement	Diversity campaign co-chair (2018), treasurer & fundraising manager (2014-2015), resident assistant (2014-2015), graduate delegate (2013-2014), career counseling chair (2013-2014).
Hobbies	Violin playing (9 years), music theory (11 years), singing (choir, lead singer).

Joy Pasquet
Engineering | City Planning | Geospatial Analytics
+1 510 735 5745
joy_pasquet@berkeley.edu

Academic & Professional Project Highlights

2020   Recommending parking investments to cities - JUMP

In short: Developed a standard methodology to recommend locations for micromobility parking investments.

Geographical scope: France (Paris), Germany (Berlin), Mexico (Mexico City), Portugal (Lisbon), United Kingdom (London), United States (Denver, Washington D.C.).

Skill sets: Python, SQL, H3 spatial index, QGIS, Adobe Illustrator, Web mapping.

- Created a framework to identify locations in need of micromobility parking investments (capacity increase, new location, bikeshare docks conversion), the type of infrastructure needed (bike racks v. painted drop zones), and target capacity.
- Wrote a Python & SQL script capable of generating recommendations within minutes for any given city, using internal and open source data (city portals, OpenStreetMap).
- Collaborated with Market Entry, Launch, Policy and Operations teams to include recommendations in dockless bike and scooter permits applications.
- Collaborated with Policy teams to share recommendations with policy-makers in 6 cities, which led to the installation of at least 6 recommended locations (as of May 2020).

2019   Standardizing micromobility parking data - JUMP

In short: Piloted a new data architecture for micromobility parking public data.

Geographical scope: France (Paris), Germany (Berlin), Mexico (Mexico City), Portugal (Lisbon), United Kingdom (London), United States (Denver, Washington D.C.).

- Wrote a set of Python scripts to generate a standardized dataset with clean micromobility parking data, based on public data (city portals, OpenStreetMap) for ingestion into Uber's database.
- Piloted the new data architecture for 7 cities by collecting, cleaning and ingesting data into the database, and provided feedback on feasibility.

2019   Designing service areas for dockless bikes & scooters - JUMP

In short: Standardized an international SOP for service area design.

Geographical scope: Australia (Gold Coast), Belgium (Brussels), France (Paris), Germany (Munich), Netherlands (Rotterdam, The Hague, Delft) New Zealand (Auckland), Spain (Madrid, Seville), United Kingdom (London), United States (San Francisco).

Skill sets: Python, SQL, Web mapping, QGIS, Adobe Illustrator, Languages (French, German, Spanish, Dutch).

- Streamlined the existing US-centered methodology for service area design to be compatible with any geography.
- Wrote a set of Python & SQL scripts capable of generating within minutes a prediction of micromobility demand for any given city, using internal and open source data (national census, city portals, OpenStreetMap), which can then be used to select service area boundaries.
- Implemented the methodology for 10+ cities across 3 business regions.
- Collaborated with Market Entry, Launch, Policy and Operations teams to get consensus on the final service area to be used in-app for 4 cities, and include it in permits applications.

2018-2019   Microtransit in a transit-first city: rethinking the future of on-demand transit in San Francisco after Chariot - UC Berkeley

In short: Drew lessons from microtransit company Chariot in San Francisco as part of my master's thesis.

Geographical scope: United States (San Francisco).

Skill sets: Python, ArcGIS, Adobe Illustrator, Adobe InDesign.

- Collected data on Chariot service in San Francisco and assessed the risk for competition between Chariot and Muni by analyzing potential ridership impact using Python.
- Generated a mock GTFS feed based on the advertised headways using Python.
- Assessed opportunities for synergies between fixed and on-demand transit by estimating transit accessibility improvements from integrating the Muni, BART, and Chariot networks, using Python.
- Conducted in-depth interviews with San Francisco stakeholders to gain insights on the relationships between transit and microtransit.

2018   Electrification of *peseros* in Mexico City - UC Berkeley

In short: cost-benefit analysis of a policy aiming to electrify informal microbuses in Mexico City (group project).

Geographical scope: Mexico (Mexico City).

Skill sets: Benefit-cost analysis, Python.

- Scoped out the policy and identified impacts to be included in the analysis.
- Modeled the evolution of the city's fleet over the policy's timeframe by using Python.
- Monetized impacts related to the fleet age on bus maintenance costs and road safety.