APG (Automatic Persona Generation) - https://persona.qcri.org

Automatically Conceptualizing Social Media Analytics Data via Personas

Soon-Gyo Jung, Joni Salminen, Jisun An, Haewoon Kwak, Bernard J. Jansen Qatar Computing Research Institute, Hamad Bin Khalifa University

What is Persona?

Representations of segments of actual users, presented as an imaginary person



- Being integrated into many design, product, marketing, content, and advertising development processes in order to describe and communicate about core users, customers, or audiences

- Assisting in defining organizational strategy, develop new products, and improve customer operations

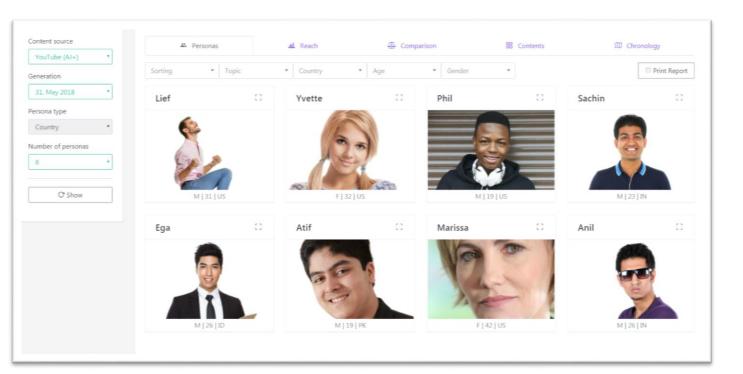
Why Automate Persona?

Numbers are not always good

APG Features

Persona Retrieve

- A user can select the desired **content** source and a specific generation of personas - The user can also select a persona type and the **number of personas**, from a minimum of 5 and a maximum of 15



contents

امعة حمدين خليفة

Pictures copyrights purchased, age, gender and country appropriate as tagged by stock photo companies **Names** ethnically appropriate and where possible appropriate by age, gender and country

About Persona

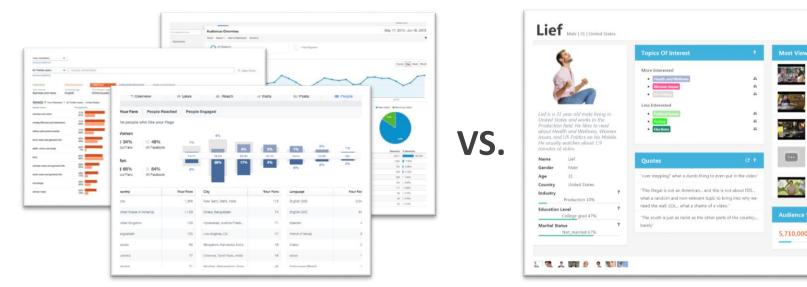
- Snippet containing

Lief Male | 31 | United St

Most Viewed Contents

- Displays the 'favorite' contents - Hyperlinked to actual

But, users want less data, more insights!

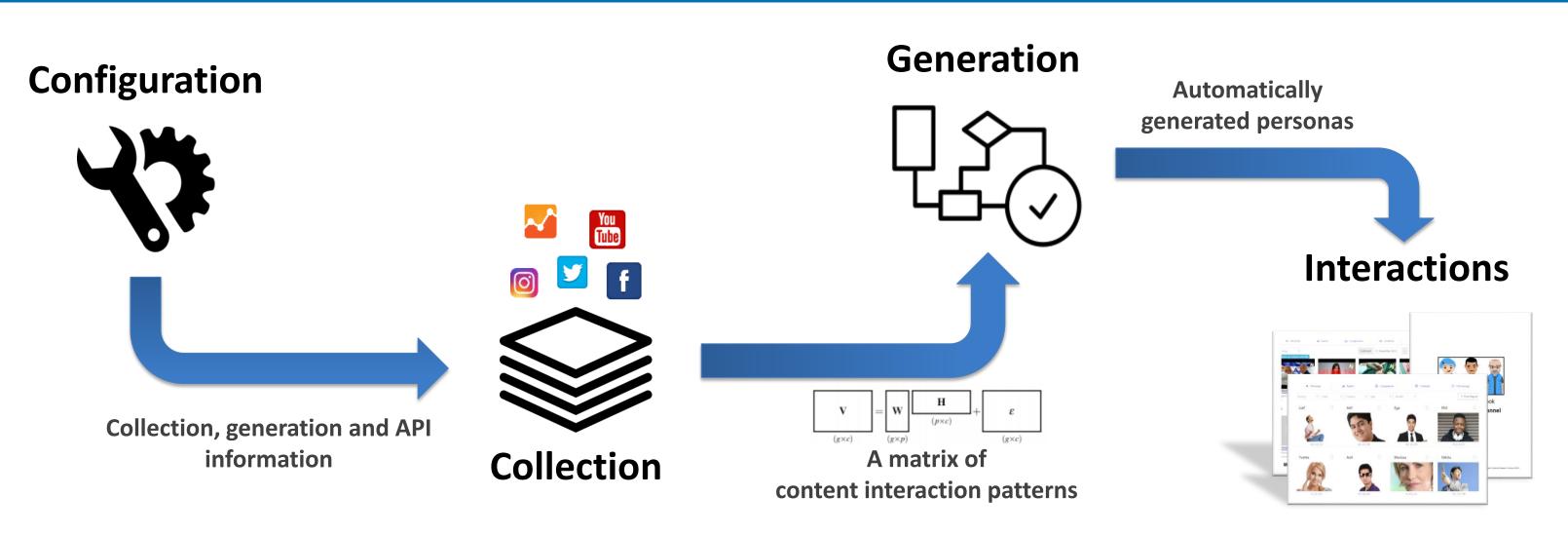


Benefits

- Real data on demographics and behavior
- Rapid creation time - Frequently updated

Better personas, better decisions -> Better results

APG Overview



information about the persona, such as device used, duration of watching contents, etc

Topics of Interest - Top three **most** preferred topics and three least preferred

	otes	omment		_	
<u>R</u> 18		ę.			1/8, 05. June 2018, You
	Not_married 71%		10,3	50,000 people	
Marital Stat			uage she is lying"	ence Size	?
Industry Education L	Sales 9%	"All you social media users funded this the internet was intended for, cancel yo		Border Between The Koreas Direct From - AJ+ 12. September 2017	With Dena Takruri
Age Country	31 United States	"Mark Zuckerberg is Evil! ++++++++++++++++++++++++++++++++++++	••"	Health and Wellness Explaining The DMZ:	
Gender	Male	Quotes	C 1	16. December 2014	-
field. He like Issues, Turk	es and works in the Sales es to read about US Social rey, and Elections on his usually watches about 1.4 video.	Women Issues US Politics		Police Did These Swedish Cops School The 24. April 2015 Women Issues The Life Of An Eight Ball Of	-
Lief is a 31 year old male living in		Elections Less Interested Health and Wellness	···	Rohingya The Untold Story Of America's [Chinese Food: An All-American Cuisine, I 16. August 2017	
5	A all	More Interested US Social Issues Turkey		Carolinians 30. June 2015	

media platforms corresponding to the

most viewed contents

Audience Size - The audience size on **Facebook Marketing** for this persona

Current reach Country, age, and gender based rea Audience size Personas

Reach of Personas

- See the proportions of each persona in current reach and audience size

- Measure how the proportion of target audience size is different with the proportion of current reach

🛎 Personas		AL Reach	🕀 Comparison	88 Contents	D Chronology	
Select personas						
0	Phil	Ethan	Kayla	Atif	Anil	
Image	Canal State	10 A			2	Image
Gender	Male	Male	Female	Male	Male	Gender
Age	22	33	28	23	28	Age
Country	United States	United States	United States	Pakistan	India	Country
Industry	Sales	Sales	Sales	Healthcare and Medical Services	Sales	Industry
Education Level	College grad	College grad	College grad	College grad	College grad	Education Level
Marital Status	not_married	not_married	not_married	not_married	not_married	Marital Status
More Interested Topics	News Distants Distantal Inverse	Us Social Insurs Tarkey Elections	Elections Tuskey	Funce Sector funces Legal Towars	Vouth Issues Pattical Issues Unit Social Issues	More Interested Topics
Less Interested Topics	Health and Wellness Un Parises International Affairs	Fissith and Wellines Worran Julies Life Perside	Health and Wellness Rohingpi 105 Postics	Instruction Tenner Fyliads and Colorer	Itraffs and Wellness International Attains Turkey	Less Interested Topics
Audience Size	2.149.000	10,350,000	18,850,000	2.450.000	5.850.000	Audience Size

Personas Comparison

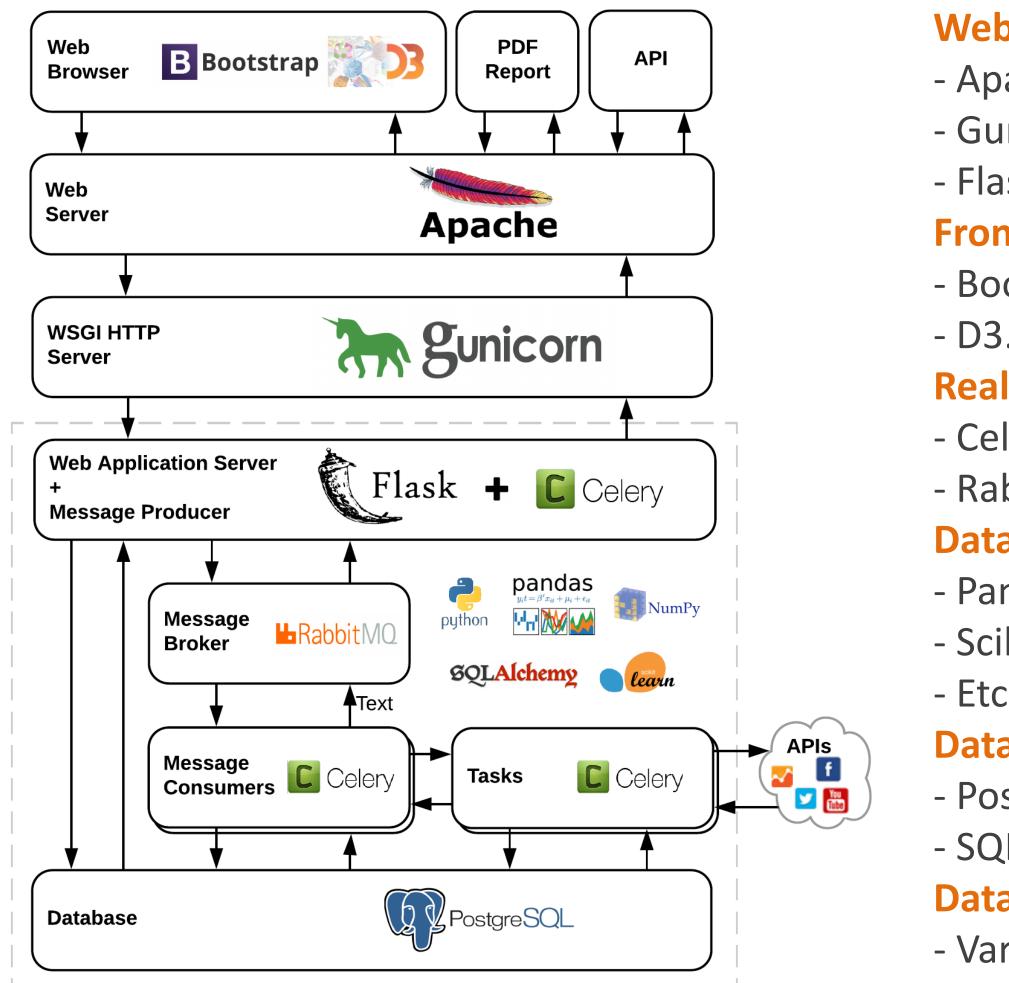
- Displays **personas with comparable** information

- Compare how personas are different or similar with each other in the same generation

Creating personas in real time

based on automated analysis of actual aggregated social media data integrating data from YouTube, Facebook, Facebook Ads, and Google Analytics for commercial organizations

APG Architecture



Web service & Back-end

- Apache2
- Gunicorn for multiple threading
- Flask

Front-end

- Bootstrap
- D3.js

Real time & Periodical processing

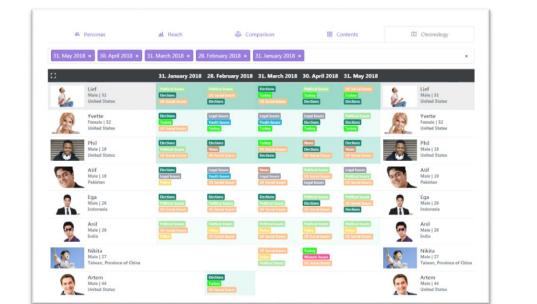
- Celery
- RabbitMQ

Data processing

- Pandas
- Scikit-learn
- Etc

Persona Content Preference

- Listing of content with associated personas
- Analyze how your content interests different segments



Chronology of Personas

- Shows the similarities and changes in the persona set over time
- See how the content preferences of the audience are changing over time

...and many more!





Jim Jansen

Haewoon Kwak





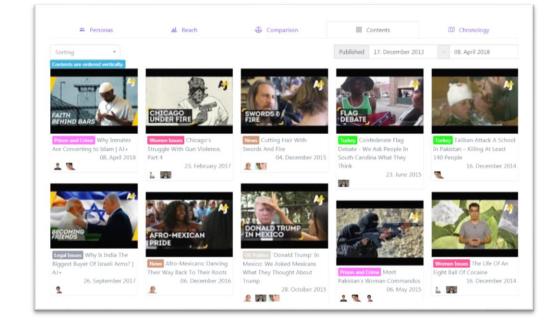


Soon-gyo Jung



Joni Salminen

LOOKING FOR COLLABORATORS jsalminen@hbku.edu.qa





Partnering with Al Jazeera Media Network, Qatar Airways, Qatar Foundation, and other organizations







"Personas give faces to data."



