

# SEARCH ENGINE MARKETING PROJECT

## Run an AdWords Campaign



**BOLENA CAMPO**



## Using the Google Ads platform:

I created, executed and monitored a search engine marketing campaign on the AdWords platform for a B2C product. I tested, controlled and optimized the results while the campaign was active, to get the best ROI possible.

In order to increase enrollment of the Udacity Artificial Intelligence program in India, I created a campaign with ad groups segmented by the customer's travel stage.



# Campaign Approach

## Description, Marketing Objective, and KPI

# 1. Approach Description

**Approach Description Course to Market:** Intro to Artificial Intelligence

**Country:** India

I decided to create two ad groups, one targeting the Awareness marketing lifecycle stage, the other targeting the Interest stage. For the Awareness campaign, I wanted to broadly target individuals with a curiosity about AI. Keywords emphasized topics such as “why should”, “**start learning**”, “**course in India**” as they relate to AI. The copy highlighted the 'free' aspect of the course and that it's easy to give it a try.

For the Interest campaign, I targeted individuals who already have a technology background and want to tap into the high-demand for AI professionals. Keywords emphasized topics such as “fundamentals”, “learn”, “job” as they relate to AI. The copy highlighted the huge demand for AI programmers

## 2. Marketing Objective & KPI

1. **The marketing objective i do aim to achieve with my campaign** is to attract potential students to Udactiy's Artificial Intelligence free course. The main objective is to gain 5 enrollment with a maximum budget of USD 100 assigned and USD 10 daily budget over 5 days.
2. **Primary KPI to track in my campaign:**  
The number of enrollment during the campaign span.



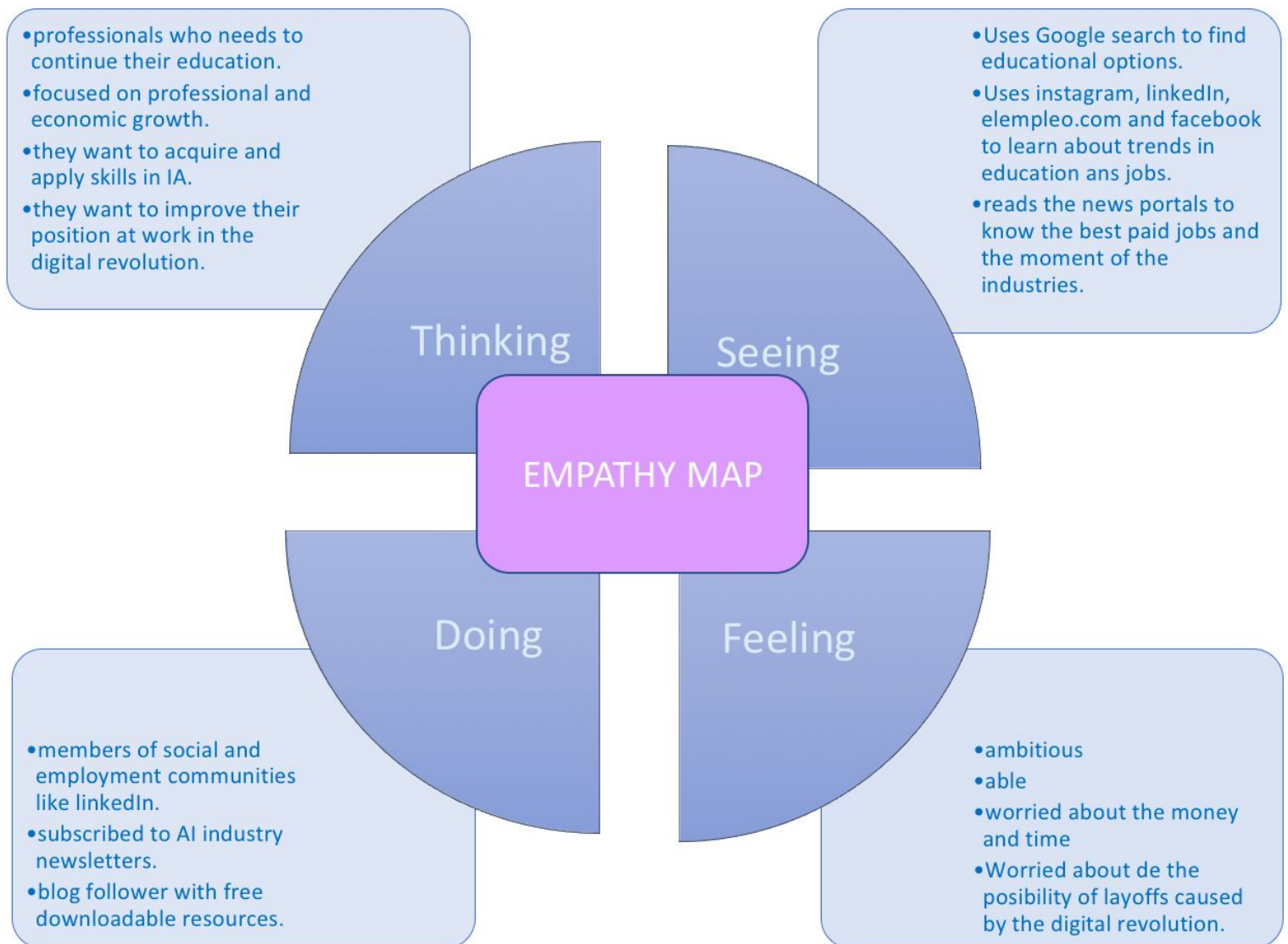
## Target Audience

Empathy maps,  
Customer  
persona.Market  
segmentation.

# 3. Empathy Maps

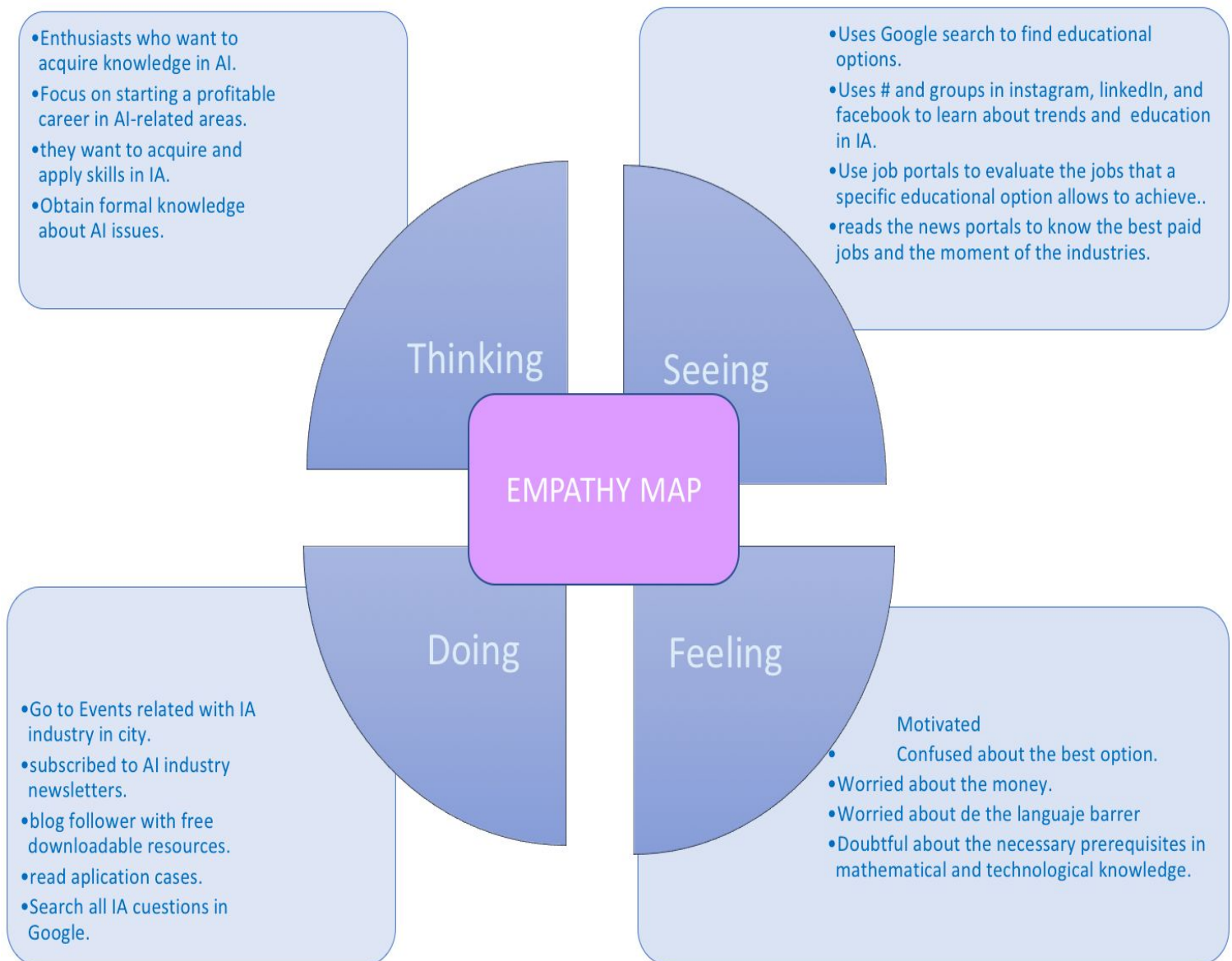
## 3.1. Group 1.

It consists of professionals who wish to integrate knowledge in AI to improve their possibilities of employment.



## 3.2 Group 2.

It consists of young people graduated from high school, AI enthusiasts and seek to understand the field and start their working life in it.





# 2. Customer persona

## 2.1 Group 1

Background and Demographics	Target Persona Name	Needs
<ul style="list-style-type: none"><li>1. 24 years old, Indian man.</li><li>2. childless, single.</li><li>3. Bachelor degree</li><li>4. Household income of USD 11K</li><li>5. Long term employee at a stable Company.</li></ul>	Aarav Acharya	<ul style="list-style-type: none"><li>1. An accessible way to continue his education.</li><li>2. Strengthen IA skills .</li><li>3. To be able to develop some of his own projects.</li><li>4. Improve her professional profile.</li></ul>
Hobbies	Goals	Barriers
<ul style="list-style-type: none"><li>1. Reading about tecnology.</li><li>2. Watch Netflix.</li><li>3. See utopical movies.</li><li>4. self-learning.</li></ul>	<ul style="list-style-type: none"><li>1. Change his position at work to the field of AI this year.</li><li>2. Increase the annual income.</li><li>3.Build a IA profesonal portfolio.</li></ul>	<ul style="list-style-type: none"><li>1.Too many incomplete IA courses.</li><li>2.Limited resources for education</li><li>3.Low availability for on-site education.</li><li>4.Lack of understanding of the digital IA landscape.</li></ul>

## 2.2 Group 2

Background and Demographics	Target Persona Name	Needs
<ol style="list-style-type: none"><li>1. 18 years old, Indian man.</li><li>2. childless, single.</li><li>3. High school Degree</li><li>4. Financial support from parents.</li><li>5. Seasonal jobs.</li></ol>	Ranjit Kumar.	<ol style="list-style-type: none"><li>1. An accessible way to continue his education.</li><li>2. Strengthen IA skills .</li><li>3. To be able to develop some of his own projects.</li><li>4. Start a professional profile.</li></ol>
Hobbies	Goals	Barriers
<ol style="list-style-type: none"><li>1. Technology reading</li><li>2. Watch streaming platforms.</li><li>3. Family time.</li><li>4. Browse the web.</li><li>5. interact social networks</li></ol>	<ol style="list-style-type: none"><li>1. Obtain certificates in AI to start a career in this field.</li><li>2. Build a IA profesional portfolio.</li><li>3. Work to the field of AI this year.</li><li>4. join an AI club</li><li>5. Generate diferent income alternatives.</li></ol>	<ol style="list-style-type: none"><li>1. Too many incomplete IA courses.</li><li>2. Limited resources for education</li><li>3. Low availability for on-site education.</li><li>4. Lack of understanding of IA landscape.</li></ol>



## User Intent

Previous Questions,  
Keywords and  
Customer Journey.

# 3. Previous Questions

## Group 1

*1- What do professionals need when they go to the search engine?*

- Information to understand the concepts of AI
- Size the branches of the field and their applications.
- Learning stages
- Required capacities.
- Jobs and income in the sector.
- Labor demand projections.
- Measure if AI can replace Human Intelligence.

## 2- What exactly are they looking for?

- General definitions.
- Fields and themes that integrate AI.
- Learning and field of study
- AI subjects
- Pros and cons of AI.
- Presentation on artificial intelligence.
- AI and machine learning courses.
- Artificial intelligence jobs

3- *Do they know what content or product they are looking for?*

- Blogs publications by topics of interest in IA
- Social networks
- Market studies
- AI education platforms with availability and English language and Hindi
- Expert recommendations: blogs, interviews, videos.
- course and blog ratings.

4- Are they in the search stage?

Yes, they are in the awareness stage, because they have a educational need but don't know the basic concepts and the options.

# 3. Previous Questions

## Group 2

*1- What do young enthusiasts need when they go to the search engine?*

- Information to understand specific concepts of AI
- AI applications.
- Comparison of learning stages
- prerequired knowledge.
- Jobs and income in the sector.
- Learn programming language.
- Formalize their previous knowledge.

## 2- *What exactly are they looking for?*

- Specific definitions.
- Fields and themes that integrate AI.
- Learning and field of study
- AI subjects
- Machine learning.
- Problems in IA.
- AI reinforcement learning.
- IA applications.
- Learn with google AI.
- AI and machine learning courses.
- Artificial intelligence jobs.
- Programming language.



3- *Do they know what content or product they are looking for?*

- Blogs publications by topics of interest in IA
- Social networks
- Market studies
- AI education platforms with availability and English language and Hindi
- Expert recommendations: blogs, interviews, videos.
- course and blog ratings.

4- Are they in the search stage?

Yes, they are in the stage of Desire, because they want a course of IA but they don't know which company.

## 4. Keywords and Customer Journey Stage.

- Professionals use general terms to refer to the needs of AI.
- Enthusiasts use more specific terms, I can note that this group has a primary knowledge about AI, and that the terms used were more technical and precise.

With this in mind, I decided to make two ad groups run by two different clients and their respective travel stages.

GROUP 1: **Professionals** in the **awareness** stage.

GROUP 2: **AI enthusiasts** at **desire** stage .

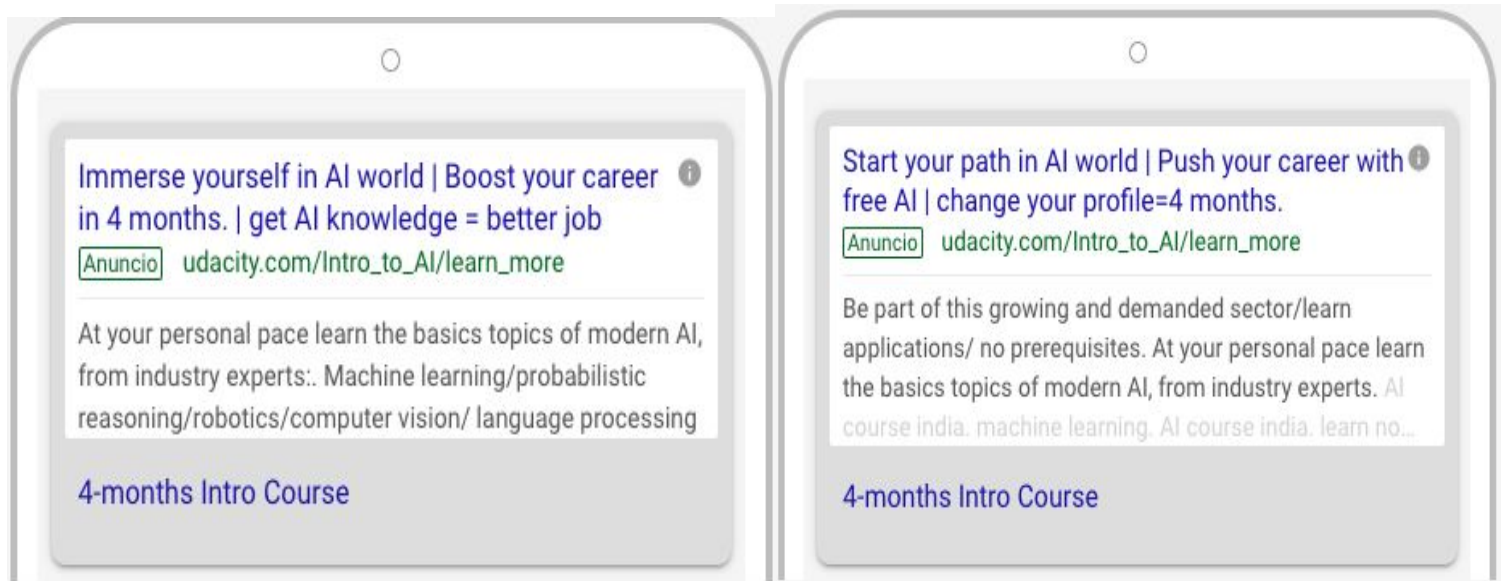


# Ad Groups

Ads and Keywords

# Ad Group #1: Professionals

## Ads & Keyword List

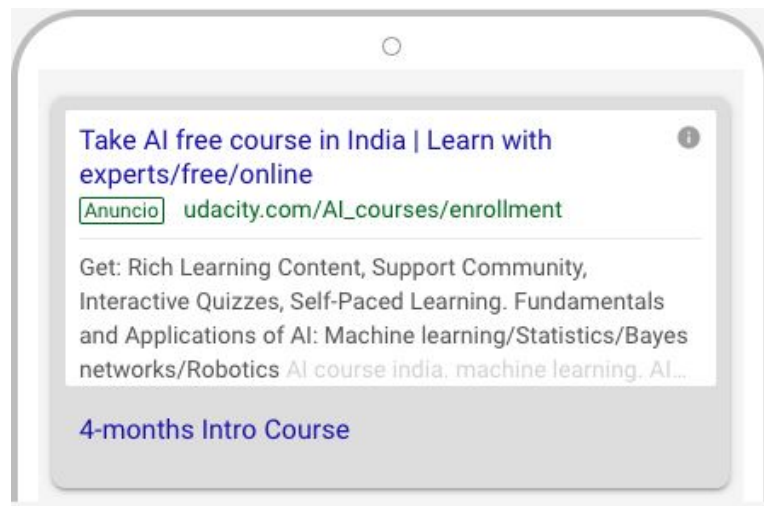
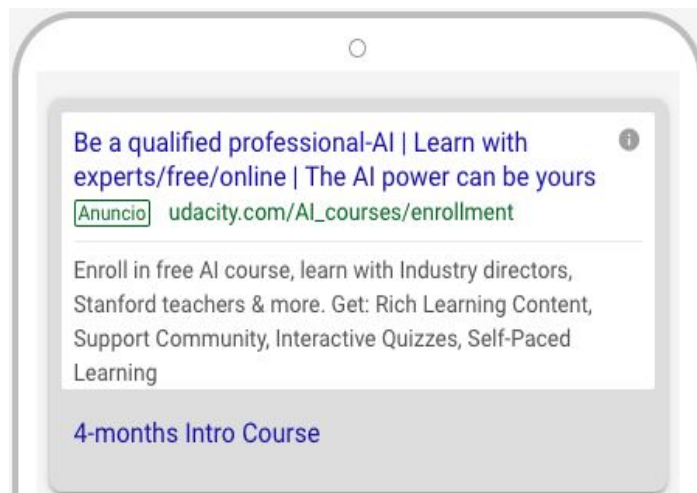


### Keyword List:

"why should I study Artificial Intelligence"  
"why Artificial Intelligence is needed" "start learning Artificial Intelligence"  
"prerequisites for machine learning" "Microsoft AI School" "machine learning course" "introduction to machine learning" "intro to artificial intelligence" "how do I start learning machine learning" "Google AI FREE" "Artificial Intelligence free course in India" "Artificial Intelligence free course" "Artificial Intelligence course in India" "artificial intelligence course in india" "Artificial Intelligence course" "applications of artificial intelligence" "ai robot" "AI free course" "ai courses" "AI course in India" "ai certification online"

# Ad Group #2: Enthusiast

## Ads & Keyword List



### Keyword List:

"Udacity Artificial Intelligence course"

"Udacity AI in India" "Udacity AI free course" "Udacity AI course" "Microsoft AI School" "Learn Uncertainty AI" "Learn Statistics AI" "Learn Robotics"

"Learn robot motion planning" "Learn probabilistic reasoning" "Learn Natural language processing AI" "Learn natural language processing" "Learn Machine learning" "Learn Logic AI" "Learn information retrieval AI"

"Learn computer vision"

"Learn Computer science" "Learn Bayes networks" "Image processing and computer vision" "Google AI FREE" "Artificial Intelligence udacity" "Artificial Intelligence course in India" "Artificial Intelligence course" "AI udacity"



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# Appendix

## Screenshots for Reference

# I invite you to review my campaign.

todas las campañas >

Leads-india-IA

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En pausa

Tipo: Búsqueda

Presupuesto: 10,00 US\$/día

Cerrar

Visión general

Recomendaciones

Grupos de anuncios

Anuncios y extensiones

Páginas de destino

Palabras clave

Audiencias

Datos demográficos

Configuración

Ubicaciones

Programación de anuncios

Dispositivos

Ajustes de puja avanzados

Historial de cambios

Borradores y

Información de esta campaña

EDITAR EN CONFIGURACIÓN

📅

Del 13 sept. 2019 al 18 sept. 2019

🕒

Todos los días, De 13:30 a 20:30

📍

India

🌐

Hindi, Inglés

Meta de la campaña

Oportunidades de venta

Estrategia de puja


CPC (mejorado)

Grupos de anuncios

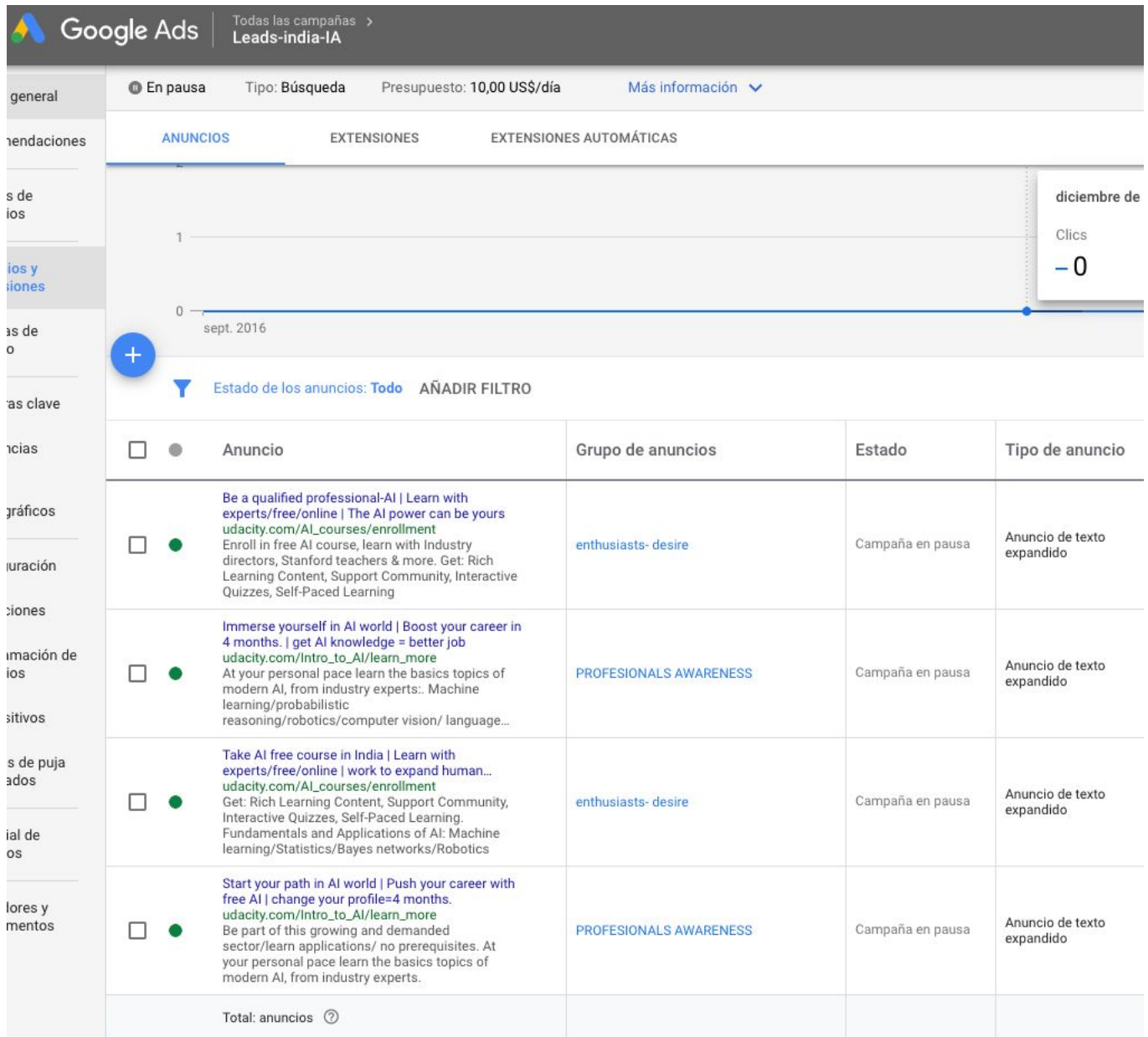
2 grupos de anuncios estándar · 0 grupos de anuncios dinámicos

Grupo de anuncios	enthusiasts- desire
Tipo	Estándar
CPC máx.	3,00 US\$ (mejorado)
Palabras clave	AI udacity, Artificial Intelligence course y 22 más
Extensiones de anuncio	Extracto de sitio dinámico, Texto destacado dinámico y 1 más

Grupo de anuncios	PROFESIONALS AWARENESS
Tipo	Estándar
CPC máx.	3,00 US\$ (mejorado)
Palabras clave	AI course in India, AI free course, Artificial Intelligence course y 12 más
Extensiones de anuncio	Extracto de sitio dinámico, Texto destacado dinámico y 1 más

 **DIGITAL MARKETING**  
NANODEGREE PROGRAM

# Campaign Summary





# Ad Groups

Grupo de anuncios	Estado	CPC máx. predeterminado	Tipo de grupo de anuncios	Clics	Impresiones	CTR	CPC medio	Coste	Conversiones	↑ Coste/cor	Tasa de conversión
enthusiasts- desire	Apto	3,00 US\$ (mejorado)	Estándar	10	82	12,20 %	2,12 US\$	21,16 US\$	1,50	14,11 US\$	15,00 %
PROFESIONALS AWARENESS	Apto	3,00 US\$ (mejorado)	Estándar	15	193	7,77 %	2,05 US\$	30,69 US\$	2,00	15,35 US\$	13,33 %
Total: grup... ?				25	275	9,09 %	2,07 US\$	51,85 US\$	3,50	14,81 US\$	14,00 %
Total: exp... ?				0	0	–	–	–	0,00	–	0,00 %
Total: cam... ?				25	275	9,09 %	2,07 US\$	51,85 US\$	3,50	14,81 US\$	14,00 %

# Ads

Anuncio	Grupo de anuncios ↓	Estado	Tipo de anuncio	Clics	Impresion	CTR	CPC medio	Coste	Conversio	Coste/cor	Tasa de conversión
Immerse yourself in AI world   Boost your career in 4 months.   get AI knowledge =... udacity.com/Intro_to_AI/learn_more At your personal pace learn the basics topics of modern AI, from industry experts.: Machine learning/probabilistic reasoning/robotics/computer vision/...	PROFESIONALS AWARENESS	Aprobado	Anuncio de texto expandido	13	141	9,22 %	2,28 US\$	29,58 US\$	2,00	14,79 US\$	15,38 %
Start your path in AI world   Push your career with free AI   change your profile=4 months. udacity.com/Intro_to_AI/learn_more Be part of this growing and demanded sector/learn applications/ no prerequisites. At your personal pace learn the basics topics of modern AI, from industry experts.	PROFESIONALS AWARENESS	Aprobado	Anuncio de texto expandido	2	52	3,85 %	0,56 US\$	1,11 US\$	0,00	0,00 US\$	0,00 %
Be a qualified professional-AI   Learn with experts/free/online   The AI power can be... udacity.com/AI_courses/enrollment Enroll in free AI course, learn with Industry directors, Stanford teachers & more. Get: Rich Learning Content, Support Community, Interactive Quizzes, Self-Paced Learning	enthusiasts- desire	Aprobado	Anuncio de texto expandido	2	5	40,00 %	1,63 US\$	3,26 US\$	0,00	0,00 US\$	0,00 %
Take AI free course in India   Learn with experts/free/online   work to expand huma... udacity.com/AI_courses/enrollment Get: Rich Learning Content, Support Community, Interactive Quizzes, Self-Paced Learning. Fundamentals and Applications of AI: Machine learning/Statistics/Bayes...	enthusiasts- desire	Aprobado	Anuncio de texto expandido	8	77	10,39 %	2,24 US\$	17,90 US\$	1,50	11,93 US\$	18,75 %
Total: anuncios ⓘ				25	275	9,09 %	2,07 US\$	51,85 US\$	3,50	14,81 US\$	14,00 %
Total: experimentos ⓘ				0	0	—	—	0,00 US\$	0,00	0,00 US\$	0,00 %
Total: campaña ⓘ				25	275	9,09 %	2,07 US\$	51,85 US\$	3,50	14,81 US\$	14,00 %

# Keywords

Palabra clave	Grupo de anuncios	Estado	CPC máx.	Detalles de la política	URL final	↓ Clics	Impresiones	CTR	CPC medio	Coste	Convers	Coste/conv	Tasa de conversión
las palabras clave exc... ?						25	275	9,09 %	2,07 US\$	51,85 US\$	3,50	14,81 US\$	14,00 %
"ai courses"	PROFESIONALS AWARENESS	por la primera página (10,19 US\$)	3,00 US\$ (mejorado)	Aprobado	—	5	47	10,64 %	1,42 US\$	7,11 US\$	1,00	7,11 US\$	20,00 %
"machine learning course"	PROFESIONALS AWARENESS	Por debajo de la puja por la primera página (9,17 US\$)	3,00 US\$ (mejorado)	Aprobado	—	5	85	5,88 %	2,55 US\$	12,74 US\$	0,00	0,00 US\$	0,00 %
"Artificial Intelligence course"	enthusiasts- desire	Por debajo de la puja por la primera página (3,38 US\$)	3,00 US\$ (mejorado)	Aprobado	—	4	41	9,76 %	2,31 US\$	9,25 US\$	0,50	18,50 US\$	12,50 %
"Learn Machine learning"	enthusiasts- desire	Apta	3,00 US\$ (mejorado)	Aprobado	—	3	27	11,11 %	2,22 US\$	6,65 US\$	0,00	0,00 US\$	0,00 %
"learn ai"	PROFESIONALS AWARENESS	Por debajo de la puja por la primera página (5,92 US\$)	3,00 US\$ (mejorado)	Aprobado	—	3	23	13,04 %	2,60 US\$	7,81 US\$	1,00	7,81 US\$	33,33 %
"Learn computer vision"	enthusiasts- desire	Apta	3,00 US\$ (mejorado)	Aprobado	—	1	1	100,00 %	2,00 US\$	2,00 US\$	1,00	2,00 US\$	100,00 %

# Key Campaign Results (Campaign & Ad Groups)

I present the results of my campaign and ad groups in the table below.

Ad Group	Max. CPC Bid	Impr.	Clicks	CTR	Avg. Cost per Click	Conv.	CR	Cost per Conv.	Cost
<i>Professional-Awareness</i>	3,00 US\$	193	15	7,77 %	2,05 US\$	2,00	13,33 %	15,35 US\$	30,69 US\$
<i>Enthusiast-Desire</i>	3,00 US\$	82	10	12,20 %	2,12 US\$	1,50	15,00 %	14,11 US\$	21,16 US\$
<b>Total</b>		<b>275</b>	<b>25</b>	<b>9,09 %</b>	<b>2,07 US\$</b>	<b>3,50</b>	<b>14,00 %</b>	<b>14,81 US\$</b>	<b>51,85 US\$</b>

# Key Campaign Results

## (Ads)

I present the results of my ads in the table below.

Ad	Clicks	CTR	Avg. Cost per Click	Conv.	CR	Cost per Conv.
Ad Group 1, Ad 1	13	9,22 %	2,28 US\$	2,00	15,38 %	14,79 US\$
Ad Group 1, Ad 2	2	3,85 %	0,56 US\$	0,00	0,00 %	0,00 US\$
Ad Group 2, Ad 1	8	10,39 %	2,24 US\$	1,50	18,75 %	17,90 US\$
Ad Group 2, Ad 2	2	40,00 %	1,63 US\$	0,00	0,00 %	3,26 US\$

# Key Campaign Results

## (Keywords)

I present the three keywords I consider most successful based on your marketing objective.

Keyword	Clicks	CTR	Avg. Cost per Click	Conv.	CR	Cost per Conv.
"AI courses"	47	9,09 %	1,42 US\$	1	20,00 %	7,11 US\$
"machine learning course"	5	5,88 %	2,55 US\$	0,00	0,00 %	0,00
"Artificial Intelligence course"	4	9,76 %	0,50	0,50	12,50 %	18,50 US\$

# Campaign Evaluation

- The main objective is to obtain 5 course records. However, it took another conversion to reach my goal.
- The ROI (4 conversions \* \$ 60 of profit- \$ 51.85 US \$ amount spent) = \$ 188.15: since the cost is less than the profit, the ROI is positive.
- The conversion rate of the better performing ad group is about 18.15%, which is 1.8 times my expectation of 10%.
- The average cost per click was \$ 2.07, lower than Max.CPC bid of \$ 3.
- Both ad groups performed similarly:
  - Each one got 2 conversions
  - The CPC rank was between \$ 2.05 (professional) and \$ 2.12 (desire)
  - The range of Clicks was between 10 (desire) and 15 (professional).

- However, the second announcement (desire) was more effective since:
  - It clicks were 12% of the impressions (CTR), while for the first one (professional) they were 7%.
  - The announcement with the best CTR (40%) was: *"Be a qualified professional-AI | Learn with experts / free / online | The AI power can be ..."*, which belongs to the second group as well.
  - The keyword with more clicks (Artificial Intelligence course") belongs to the same ad group and contributed to a conversion. However, It was expensive \$ 9.25 for 4 clicks. This may be because the keyword is a headtail keyword and the daily budget limit of ad group was \$ 10, which consumed most of the budget limiting the other ads for that day. In other words, avoiding more impressions and therefore decreasing the probability of clicks and conversions
  - The cost was lower and obtained the same amount of conversions.



- Keywords are subject to higher competition in AdWords are those of generic terms or head tail keywords. In this campaign were the following: *"Image processing and computer vision"*, *"Artificial Intelligence course"*, *"Learn Machine learning"*.
- Keywords performed best was: *"AI courses"*, *"machine learning course"*, *"Artificial Intelligence course"*, because all of them are relevant to the offer of the promoted course whereby I obtained some of the conversions.
- The result implies that people have a clear curiosity in what we offer, but not all of them have a high intention of taking the course.
- Finally, the use of Phrase match in all keywords might be another cause of the low conversion rate.

# Recommendations for future campaigns

- Focus on both Ad Groups, but in the ad of better performance of each one of them. I would take the keywords with better performance of the whole campaign to make refinement, new lists and then A / B test with the variable: headlines, the which should be built based on the new keywords.
- Refine my customer person
- Use a wider match type with that new list of long tail keywords.
- Work to increase the intention of the client through the customer journey, using as a basis the data collected in this campaign.