

## Information Technology Courses in Large Scale to Supply National Demands

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CONASENSE 2022  
28/06/2022

# Brazil

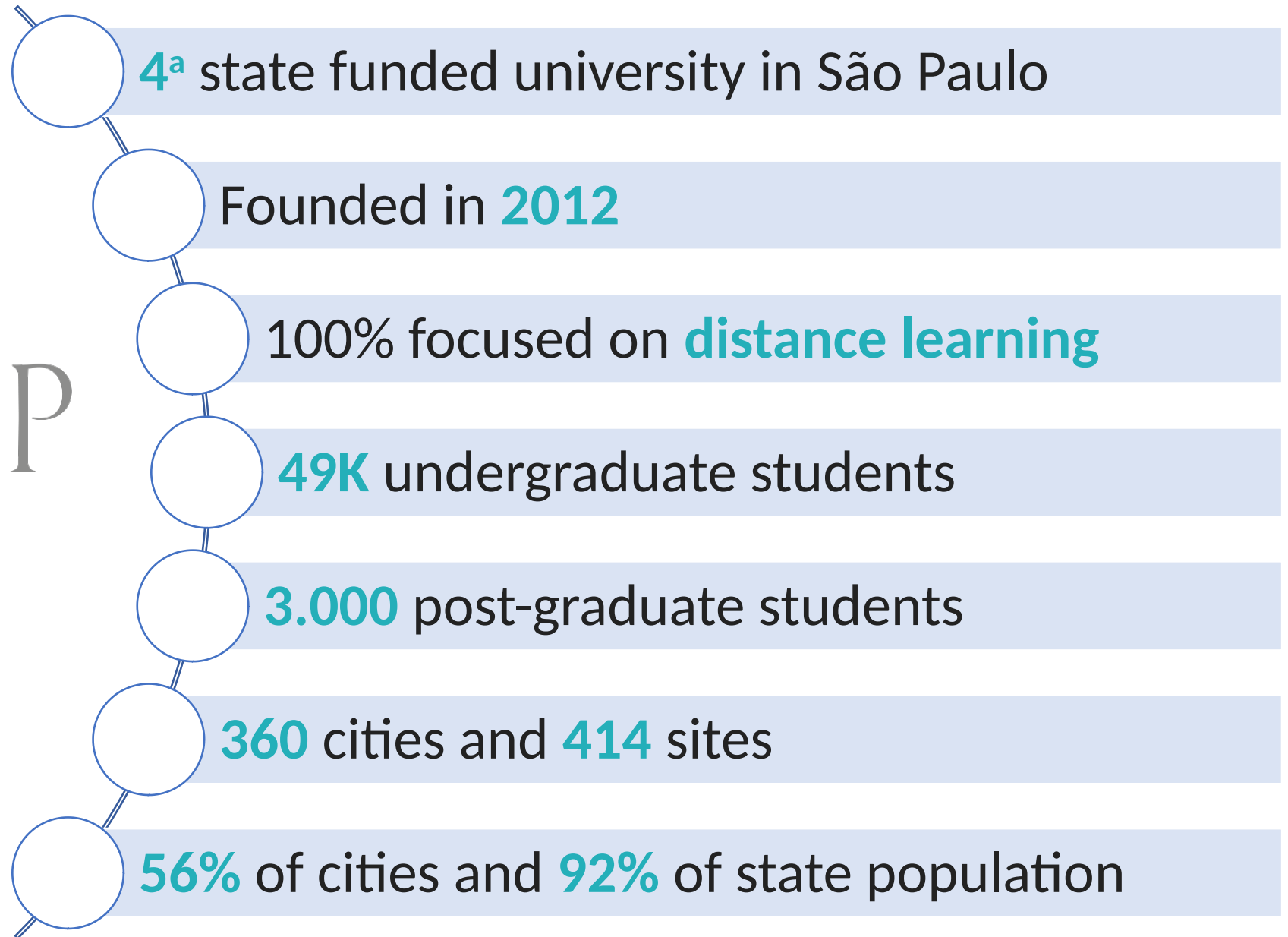


212 million people

# State of São Paulo

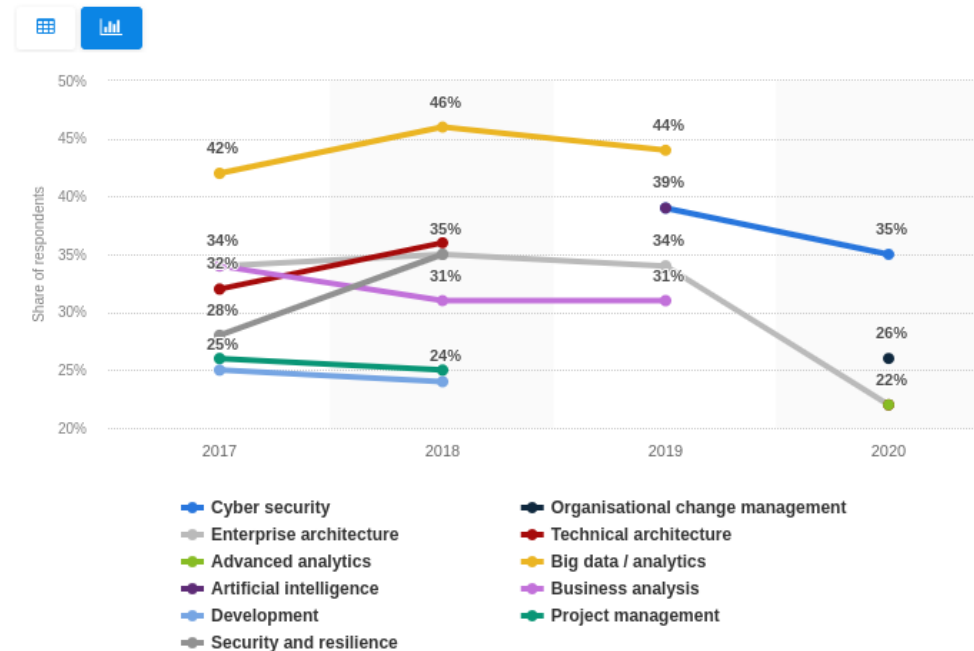


44 million people  
645 cities



# A worldwide problem

IT functions suffering from skills shortages according to IT leaders worldwide in 2017 and 2020



## IT Workers Will Be Hard to Find and Keep in 2022

By Nicole Lewis  
December 13, 2021

## The shortage of tech workers is about to become an even bigger problem for everyone

IT leaders see the shortage of talent as the biggest barrier to adoption for two-thirds of emerging technologies. That's coming in the way of organizations' digital transformations.

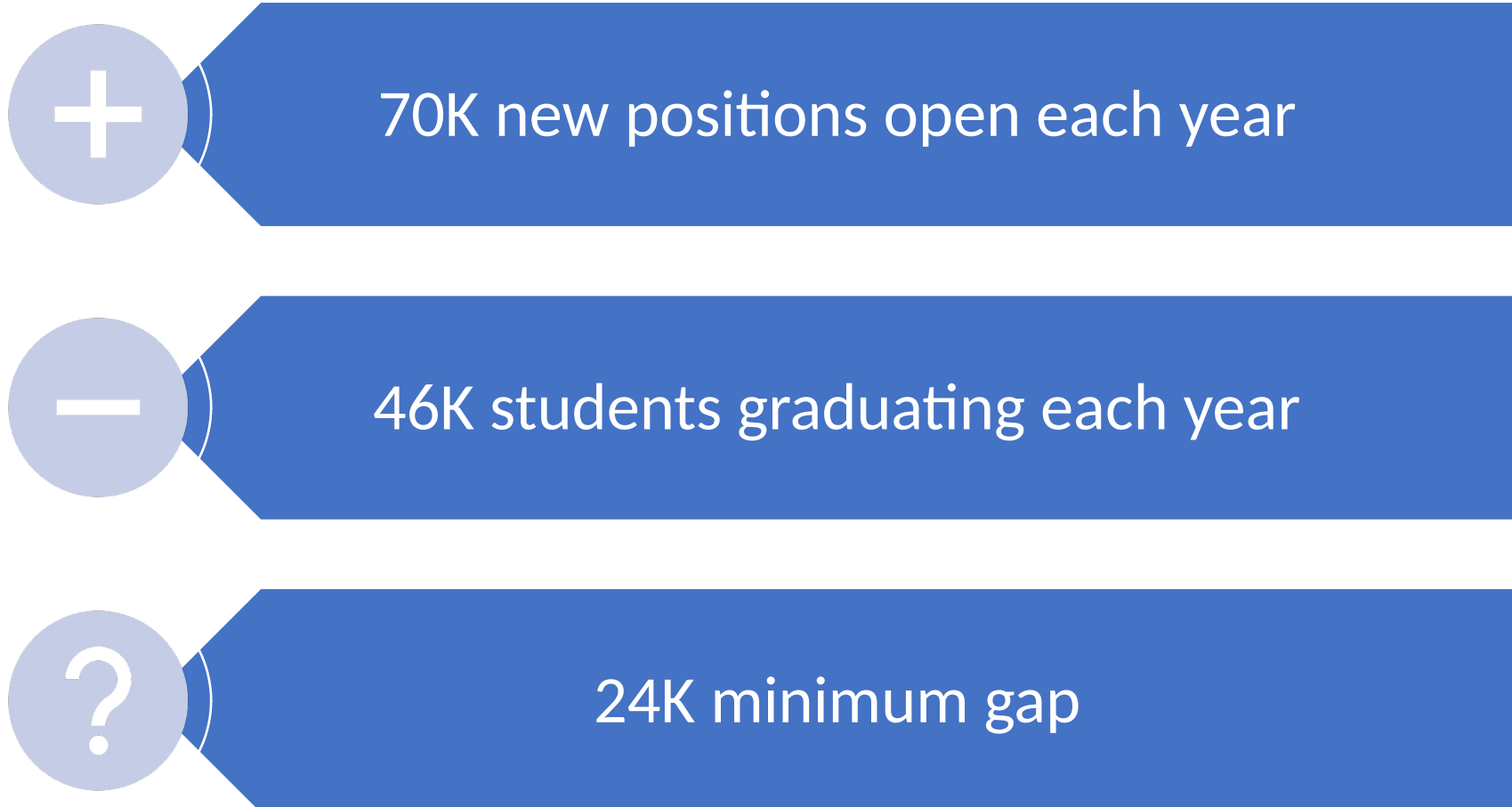


Written by Daphne Leprince-Ringuet on Sept. 13, 2021

## The Software Developer Shortage in the US and the Global Tech Talent Shortage in 2022

JAN 05, 2022 [Trends](#)

# The Brazilian size of the shortage



# UNIVESP response for this challenge



Redesigned our IT courses



Increased partnership with companies for employability



Increased the number of students



Student Projects



# Redesigned our IT courses

3 semesters  
of basic IT  
classes

+3 semesters for  
bachelor degree in IT

+5 semesters for bachelor degree in Data  
Science

+7 semesters for bachelor degree in Computer  
Engineering





# Increased partnership with companies



## **New approach for internships**

Companies are offering 2-3 months of skill training

Company sponsored tracks

Company mentors for students

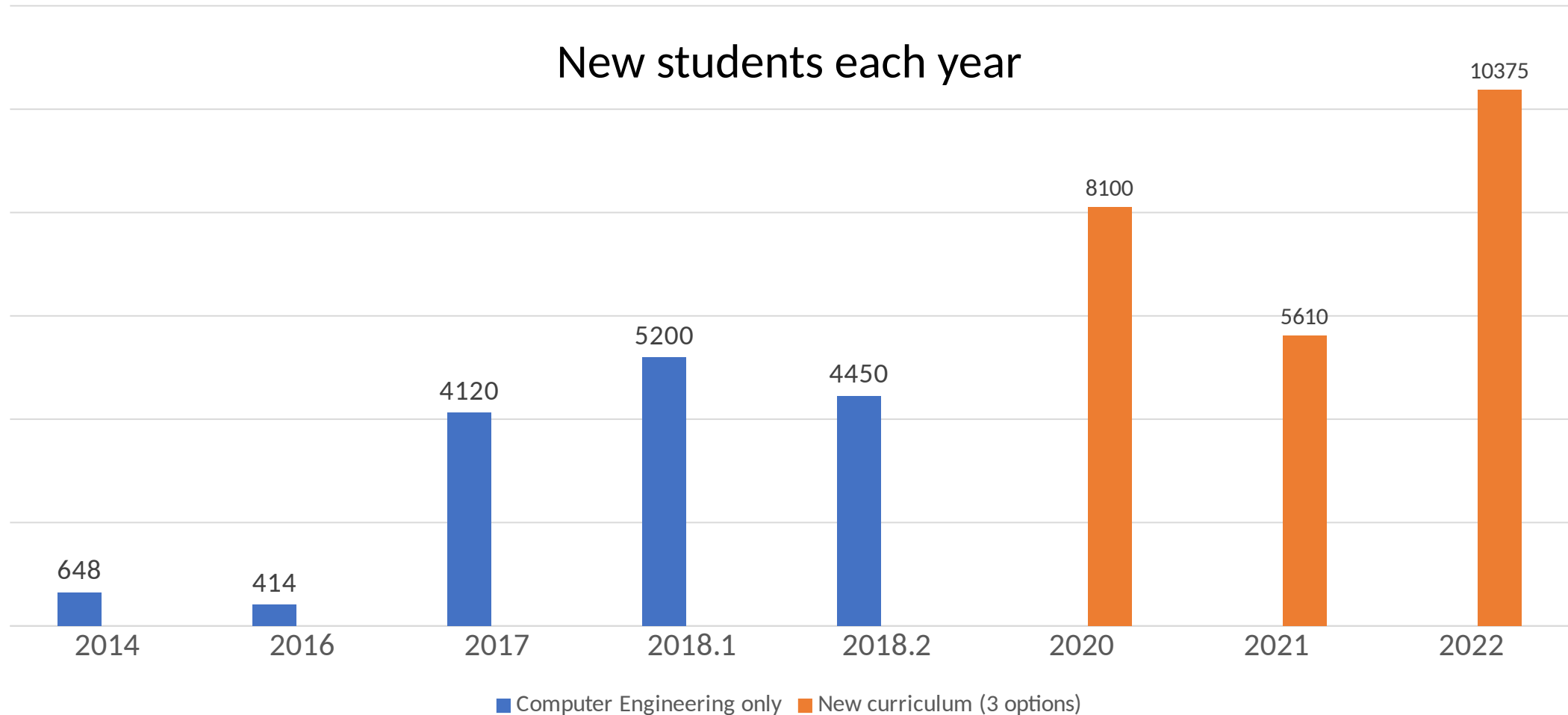


## **Added new online hiring events**

One every two weeks for more 100+ students



# Increased the number of students





# Student projects

- Every semester after the basic classes
- Design Thinking Methodology
  - Group projects
  - Students look for a problem
  - Design a solution
  - Implement a prototype
- Results shared as report and videos



## Info

**Location:** Araras

**Degree:** Computer  
Engineering

**Students:** Carlos Eduardo  
Matos da Luz, Igor Savitsky,



## Student Project

# IoT for home garden

**Abstract:** tofacilitating the care and maintenance of home gardens, the team developed a tool consisting of a hardware and an application (App) for mobile devices with Android operating system. The App makes use of several sensors to automate the watering of the vegetable garden and controls the actions on it. The target users will have quickly and easily control the amount of water used and at what times the plants will be watered according to the environmental conditions obtained by the sensors.

## Info

**City:** Rio das Pedras

**Degree:** Computer  
Engineering

**Students:** Adriana Martim,  
Alexandre Bortolato, Anderson  
Gonzales, José Vinícius Amorim,  
Magali Araujo, Márcia Cristina  
Corrêa e Valdecir Doniseti  
Rodrigues

## Student Project

# Rio das Pedras - Online City

**Abstract:** The main goal was to offer Internet access in public squares. The action was based on goal 11.7, Objective 11, of the 2030 Agenda of the United Nations (UN), which establishes universal access to safe, inclusive, accessible and green public spaces by 2030, for women and children, the older and disabled. The students offered internet in front of the university location after tests of signal range, power, communication speed, simultaneous users, authentication and time of use. People in the community attended the launch to access free social networks and news sites. The idea will be extended to other locations in the city, in partnership with the private sector.



## Info

**Polo:** Cubatão

**Curso:** Engenharia de  
Computação

**Alunos:** Antônio Marcos,  
Jaedson, Jefferson, João Victor,  
Luiz Carlos, Maria de Fátima e  
Ricardo Santos



## Student Project

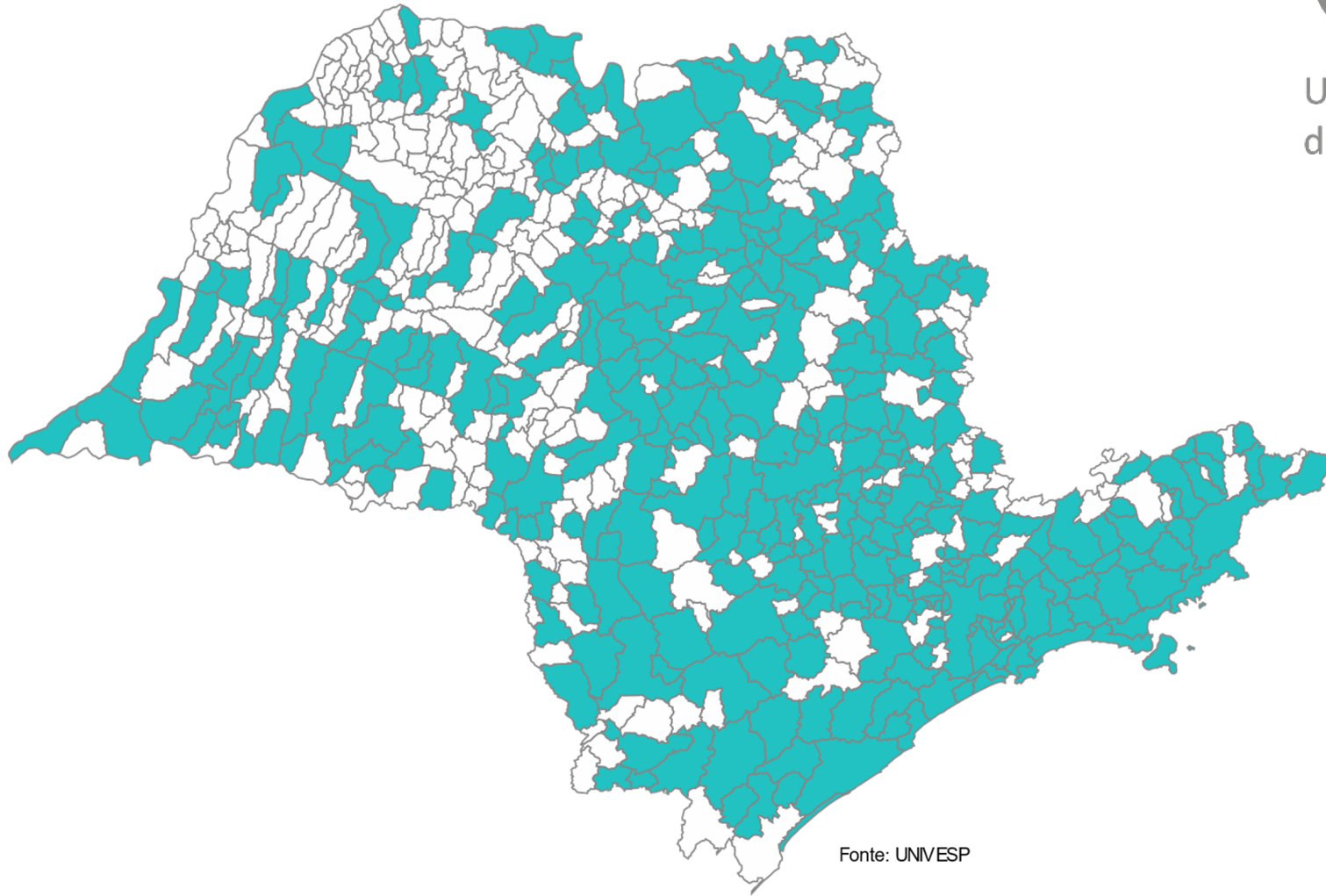
# Find your vocation App

**Abstract:** App developed for smartphones with Android platform targets young people who want to start academic life. The tool provides a range of data, with news from the academic world, information from the perspective of senior students and a virtual vocational test that indicates the inclination of the candidate to the various areas of knowledge. The idea is to combat dropout in the early years of higher education.



# Additional resources

- >11K lectures available in our YouTube channel
- >1M subscribers to the channel
- >100 open educational resources
- Support for skill training of unemployed workforce
  - More than 200K people trained in the last 2 years



Fonte: UNIVESP

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