

ÁLVARO CARRIL

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EDUCATION

Princeton University , Princeton, NJ <i>Ph.D. in Economics</i> Specialization: Labor and Development Economics, Industrial Organization	<i>Expected: Feb 2024</i>
Princeton University , Princeton, NJ <i>M.A. in Economics</i>	<i>2020</i>
University of Chile , Santiago, Chile <i>B.A. in Business & Economics</i>	<i>2013</i>

RESEARCH EXPERIENCE

Ph.D. Researcher , Princeton University Research Affiliate , ConsiliumBots	Princeton, NJ New York, NY	<i>2018 – Ongoing</i> <i>2020 – Ongoing</i>
<ul style="list-style-type: none">• Conducted independent research on educational & financial decisions using empirical and structural methods• Designed and implemented large-scale field experiments to measure biased beliefs and the effect of information on choices using Instrumental Variables methods		
Pre-Doctoral Fellow , National Bureau of Economic Research	Cambridge, MA	<i>2017 – 2018</i>
<ul style="list-style-type: none">• Estimated the effect of major & institution choice on labor market outcomes using Regression Discontinuity methods• Published a peer-reviewed paper on covariate balance with a large number of clusters in random treatment assignments		
Research Associate , Abdul Latif Jameel Poverty Action Lab	Chile & Dominican Republic	<i>2016 – 2018</i>
<ul style="list-style-type: none">• Estimated the effect of changes in international taxation on firm-level investment using Difference-in-Differences methods• Led 8 research assistants and developed software to automatize digitization and processing of historical data at scale		

SELECTED PROJECTS

IcfesBot (link ↗)	Colombia	<i>2021 – Ongoing</i>
<ul style="list-style-type: none">• Designed a chatbot that surveys and informs students about higher education degrees and financing options• Annually deployed chatbot to ≈100,000 high school seniors in coordination with the Ministry of Education• Developed multiple back-end services using AWS Lambda, API Gateway, DynamoDB and Aurora (MySQL)• Refined cold-start recommendation system by tuning and A/B testing different machine learning models		
OsoBot (link ↗)	Bogotá, Colombia	<i>2023 – Ongoing</i>
<ul style="list-style-type: none">• Designed and developed a chatbot to help students explore occupations and corresponding career paths• Developed and evaluated the effectiveness of custom LLMs in delivering reliable and relevant educational information• Deployed chatbot to 50,000 students in Bogotá in coordination with local government		
Timetable Designer (link ↗)	USA, Chile	<i>2022</i>
<ul style="list-style-type: none">• Led the design of an API to generate school timetables using Gurobi, serving a centralized school platform		

COMMUNICATION & TEACHING EXPERIENCE

Graduate Teaching Assistant , Princeton University	Princeton, NJ	<i>2014 – 2016</i>
<ul style="list-style-type: none">• Organized and taught precepts in Microeconomics, Fintech and Econometrics at the graduate and undergraduate levels		
Associate Lecturer , Abdul Latif Jameel Poverty Action Lab	Chile, Salvador, USA	<i>2014 – 2016</i>
<ul style="list-style-type: none">• Organized and taught workshops on impact evaluation methods (theory & R) to policy-makers and graduate students		
High School Teacher , Teach For All	Chile	<i>2014 – 2016</i>
<ul style="list-style-type: none">• Taught mathematics, physics and Python programming in a low-income school		

SELECTED HONORS & AWARDS

Social Data Science Graduate Fellow , for research at the technical forefront of quantitative social sciences	<i>2023</i>
Overdeck Education Fund , to support creative, interdisciplinary research on important issues in education	<i>2021, 2022</i>
The Agency Fund Grant , to support projects that leverage AI to enhance human agency	<i>2021</i>
Princeton University Graduate Fellow , funded stipend and tuition	<i>2018 – 2023</i>

SKILLS

- **Programming:** Python, R, Julia, Stata (highly proficient); SQL, JavaScript, Bash (working knowledge)
- **AWS:** Lambda, API Gateway, EC2, DynamoDB, Aurora
- **Statistics & Methods:** Causal Inference (RCT, IV, DiD, RDD), Structural Modeling (Demand Estimation)