

# SOHEIL SHAYEGH

## CURRICULUM VITAE

### PERSONAL DATA

**Current Position:** Scientist  
**Affiliation:** RFF-CMCC European Institute on Economics and the Environment  
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**Web:** <https://www.soheilsh.com>  
**ORCID:** 0000-0002-8960-8244  
**Citizenship:** USA

### EDUCATION:

**PhD**, Georgia Institute of Technology, Atlanta, USA, 2014  
**Major:** Industrial Engineering, Economic Decision Analysis  
**Minor:** Statistics  
**Dissertation Title:** Developing an Adaptive Stochastic Integrated Model for Climate Change

**MEng**, American University of Armenia, Yerevan, Armenia, 2007  
**Major:** Industrial and Systems Engineering  
**Thesis Title:** Environmental Impact Assessment of Copper Production: A Case Study on Alaverdi Copper Factory in Armenia

**MSc**, AmirKabir University of Technology, Tehran, Iran, 2005  
**Major:** Construction Engineering & Management  
**Thesis Title:** International contracts for infrastructure development projects in Iran

**BSc**, Isfahan University of Technology, Isfahan, Iran, 2002  
**Major:** Civil Engineering

### FELLOWSHIPS:

Marie Skłodowska-Curie actions, 2016  
Individual fellowships (IF)  
Fondazione Eni Enrico Mattei, Milan, Italy

Science, Technology and Innovation Policy (STIP), 2014  
Enterprise Innovation Institute  
Georgia Institute of Technology, Atlanta, USA

Sam Nunn Security Fellowship Program, 2012  
Sam Nunn School of International Affairs  
Georgia Institute of Technology, Atlanta, USA

National Iranian American Council Fellowship, 2011  
U.S. House of Representatives, Washington DC, USA  
Office of Representative Rush Holt

**RESEARCH APPOINTMENTS:**

Scientist, 2019 - now  
 European Institute on Economics and the Environments (EIEE), Milan, Italy  
*Studying the impacts of climate change on human systems*

Research Fellow, 2018 - 2019  
 Bocconi University, Milan, Italy  
*Developing an expert elicitation survey for DAC technologies*

Marie Skłodowska-Curie Fellow, 2016 - 2018  
 Fondazione Eni Enrico Mattei, Milan, Italy  
*Developing a Robust Climate Change Policymaking Decision Tool*

Postdoctoral Research Scientist, 2014 - 2016  
 Carnegie Institution for Science, Stanford University  
*Developing Integrated Assessment Models of Climate Change and Decision Tools for Climate Change Policy Making under Uncertainty*

Graduate Research Assistant, 2009 - 2012  
 H. Milton Stewart School of Industrial and Systems Engineering  
 Georgia Institute of Technology, Atlanta, USA  
 Advisor: Dr. Valerie Thomas  
*Developing a macroeconomic model for Climate Change policy evaluation*

Graduate Research Assistant, 2013 - 2014  
 School of Building Construction  
 Georgia Institute of Technology, Atlanta, USA  
 Advisor: Dr. Baabak Ashuri  
*Developing a statistical model for price adjustment policies*

Graduate Research Assistant, 2010  
 INSEAD Business School  
 INSEAD Abu-Dhabi Campus, UAE  
 Advisor: Dr. Benjamin Warr  
*Developing an energy profile model of GCC countries*

**TEACHING APPOINTMENTS:**

Instructor, Spring 2014  
 Course: Engineering Economy, ISyE 3025  
 H. Milton Stewart School of Industrial and Systems Engineering  
 Georgia Institute of Technology

Teaching Assistant, 2011, 2012, 2013  
 Course: Energy Technology and Policy, ISyE/PUBP 6701  
 H. Milton Stewart School of Industrial and Systems Engineering  
 Georgia Institute of Technology

Instructor, Spring 2008  
 Course: Introduction to Probability and Statistics  
 Department of Business and Marketing  
 EURASIA International University, Yerevan, Armenia

**PROFESSIONAL APPOINTMENTS:**

Director of Research and Development, 2008 - 2009  
 EURASIA International University, Yerevan, Armenia  
*Coordinating research grants and projects*

QA/QC Manager, 2007 - 2008  
 HADISH Engineering Company, Thika, Kenya  
*Conducting quality tests and procedures*

Founder & CEO, 2005 - 2006  
 Palar Paya Espadana, Isfahan, Iran  
*Constructing several city development projects*

Structural Engineer, 2005 – 2006  
 Palar Paya Espadana, Isfahan, Iran  
*Designing post-tensioned concrete buildings for ADAPT corporation in UAE*

**JOURNAL PUBLICATIONS:**

1. Shayegh, S. & Dasgupta, S. (2022). Climate change, labour availability and the future of gender inequality in South Africa. *Climate and Development* (doi: [10.1080/17565529.2022.2074349](https://doi.org/10.1080/17565529.2022.2074349)).
2. Shayegh, S., Emmerling J., & Tavoni M. (2022). International Migration Projections across Skill Levels in the Shared Socioeconomic Pathways. *Sustainability* (doi: [10.3390/su14084757](https://doi.org/10.3390/su14084757)).
3. Aldy, J. E., Felgenhauer, T., Pizer, W. A., Tavoni, M., Belaia, M., Borsuk, M. E., ... & Wiener, J. B. (2021). Social science research to inform solar geoengineering. *Science* (doi: [10.1126/science.abj6517](https://doi.org/10.1126/science.abj6517)).
4. Shayegh, S., Bosetti V., & Tavoni M. (2021). Future Prospects of Direct Air Capture Technologies: Insights from an Expert Elicitation Survey. *Frontiers in Climate* (doi: [10.3389/fclim.2021.630893](https://doi.org/10.3389/fclim.2021.630893)).
5. Shayegh, S., Manoussi V., & Dasgupta, S. (2021). Climate change and development in South Africa: The impact of rising temperatures on economic productivity and labor availability. *Climate and Development* (doi: [10.1080/17565529.2020.1857675](https://doi.org/10.1080/17565529.2020.1857675)).
6. Shayegh, S. & Sanchez, D. L. (2021). Impact of market design on cost-effectiveness of renewable portfolio standards. *Renewable and Sustainable Energy Reviews*, 136. (doi: [10.1016/j.rser.2020.110397](https://doi.org/10.1016/j.rser.2020.110397)).
7. Antonelli, C., Coromaldi, M., Dasgupta, S., Johannes, E., & Shayegh S. (2021). Climate impacts on nutrition and labor supply disentangled – an analysis for rural areas of Uganda. *Environment and Development Economics* (doi: [10.1088/1748-9326/ab0843](https://doi.org/10.1088/1748-9326/ab0843)).
8. Falchetta, G., Hammad A. T., & Shayegh, S. (2020). Planning universal accessibility to public healthcare in sub-Saharan Africa. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)* (doi: [10.1073/pnas.2009172117](https://doi.org/10.1073/pnas.2009172117)).
9. Casey, G., Shayegh, S., Moreno-Cruz, J., Bunzl, M., Galor, O., & Caldeira, K. (2019). The impact of climate change on fertility. *Environmental Research Letters*, 14(5), 054007 (doi: [10.1088/1748-9326/ab0843](https://doi.org/10.1088/1748-9326/ab0843)).

10. Heutel, G., Moreno-Cruz, J., & Shayegh, S. (2018). Solar geoengineering, uncertainty, and the price of carbon. *Journal of Environmental Economics and Management*, 87, 24-41 (doi: [10.1016/j.jeem.2017.11.002](https://doi.org/10.1016/j.jeem.2017.11.002)).
11. Shayegh, S. (2017). Outward migration may alter population dynamics and income inequality. *Nature Climate Change*, 7(11), 828-832 (doi: [10.1038/nclimate3420](https://doi.org/10.1038/nclimate3420)).
12. Shayegh, S., Sanchez, D. L., & Caldeira, K. (2017). Evaluating relative benefits of different types of R&D for clean energy technologies. *Energy Policy*, 107, 532-538 (doi: [10.1016/j.enpol.2017.05.029](https://doi.org/10.1016/j.enpol.2017.05.029)).
13. Shayegh, S., Moreno-Cruz, J., & Caldeira, K. (2016). Adapting to rates versus amounts of climate change: a case of adaptation to sea-level rise. *Environmental Research Letters*, 11(10), 104007 (doi: [10.1088/1748-9326/11/10/104007](https://doi.org/10.1088/1748-9326/11/10/104007)).
14. Heutel, G., Moreno-Cruz, J., & Shayegh, S. (2016). Climate tipping points and solar geoengineering. *Journal of Economic Behavior & Organization*, 132, 19-45 (doi: [10.1016/j.jebo.2016.07.002](https://doi.org/10.1016/j.jebo.2016.07.002)).
15. Ilbeigi, M., Ashuri, B., & Shayegh, S. (2016). Price adjustment clauses and submitted bid prices for major asphalt line items in highway projects. *Journal of Construction Engineering and Management*, 142(5), 04015103 (doi: [10.1061/\(ASCE\)CO.1943-7862.0001097](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001097)).
16. Shayegh, S., & Thomas, V. M. (2015). Adaptive stochastic integrated assessment modeling of optimal greenhouse gas emission reductions. *Climatic change*, 128(1-2), 1-15 (doi: [10.1007/s10584-014-1300-3](https://doi.org/10.1007/s10584-014-1300-3)).

### **WORK IN PROGRESS:**

1. Dasgupta, S., Emmerling J., & Shayegh, S. (). Inequality and growth impacts from climate change - insights from South Africa, (In preparation).
2. Falchetta, G., Malpede, M., & Shayegh, S. (). Revisiting the Contribution of Potato to Population and Urbanization in 1700-1900: The Effect of Malaria. *Environmental and Resource Economics*, (Under review).
3. Shayegh, S., & Zheng Y. (). Climate change, inequality, and wealth transfer, *Environment and Development Economics*, (Under review).

### **PREPRINTS:**

1. Shayegh, S., & Zheng Y. (2022). *Intergenerational wealth inequality and transfer in shared socioeconomic pathways A case study of South Africa*. Research Square, (doi: [10.21203/rs.3.rs-1299984/v1](https://doi.org/10.21203/rs.3.rs-1299984/v1)).
2. Shayegh, S., Emmerling J., & Tavoni M. (2022). *International Migration Projections across Skill Levels in the Shared Socioeconomic Pathways*. (doi: [10.20944/preprints202203.0218.v1](https://doi.org/10.20944/preprints202203.0218.v1)).
3. Kelly, DL., Heutel, G., Moreno-Cruz, J., & Shayegh, S. (2021). *Solar Geoengineering, Learning, and Experimentation*. NBER Working Papers, (doi: [10.3386/w28442](https://doi.org/10.3386/w28442)).
4. Shayegh, S., Crippa, F., & Dasgupta, S. (2020). *COVID-19 Impacts and Responses: The Role of the National Governments and International Organizations* (doi: [10.2139/ssrn.3716100](https://doi.org/10.2139/ssrn.3716100)).

5. Shayegh S., & Malpede M. (2020) *Staying Home Saves Lives, Really!* (doi: [10.2139/ssrn.3567394](https://doi.org/10.2139/ssrn.3567394))
6. Shayegh S., Sisco M., & Geffroy E. (2020). *Climate Concern and Policy Support Among Early-Career Scientists in Europe* (doi: [10.2139/ssrn.3540284](https://doi.org/10.2139/ssrn.3540284))
7. Shayegh S., & Herman K. (2019). *Earth and Health: Learning Across the Boundaries of Global Governance* (doi: [10.2139/ssrn.3320433](https://doi.org/10.2139/ssrn.3320433))
8. Shayegh S. et al. (2018). *Recalculating the Social Cost of Carbon* (doi: [10.2139/ssrn.3185991](https://doi.org/10.2139/ssrn.3185991))

#### **BOOK PUBLICATIONS:**

1. Shayegh, S., Heutel, G., & Moreno-Cruz, J. “Regulating Geoengineering: International Competition and Cooperation” in “**Climate Geoengineering: Science, Law and Governance**” Springer, 2021 (ISBN 978-3-030-72372-9).
2. Shayegh S. “The Role of Biofuels in Achieving a National Energy Independence Plan” in “**The Handbook of Bioenergy**”, Springer International Publishing, 2015 (ISBN 978-3-319-20091-0)
3. Shayegh S. “Environmental Impact Assessment of Copper Production: A Case Study on Alaverdi Copper Factory in Armenia”, VDM Verlag Publisher, 2008 (ISBN 978-3-639-09444-2)
4. Shayegh S. “Practicing Customer Relationship Management (CRM) System: A case on an Armenian Bank”, VDM Verlag Publisher, 2009 (ISBN 978-3-639-11412-6)
5. Sebt M. H. & Shayegh S. “BOT Contracts and their applications in Iran's infrastructure contracts” (in Farsi), Amirkabir University of Technology Publisher, 2006 (<http://www.aku-press.com/eBook.asp?M=6&Seq=487>)

#### **POLICY BRIEFS:**

1. “Climate Crunch Time” Corpus publishers, Volume 2 Issue 5, 2021 (<https://www.corpuspublishers.com/assets/articles/esecr-v2-21-1033.pdf>)
2. “Geoengineering is no climate fix. But calling it a moral hazard could be counterproductive” Bulletin of the Atomic Scientists, 10 DEC 2019 (<https://thebulletin.org/2019/12/geoengineering-is-no-climate-fix-but-calling-it-a-moral-hazard-could-be-counterproductive/>)
3. “The untold migration story - How improved policies can benefit both receiving and sending societies” Scholars Strategy Network, 22 MAR 2018 (<https://scholars.org/contribution/untold-migration-story-how-improved-policies-can-benefit-both-receiving-and-sending>)

#### **HONORS/AWARDS:**

1. Southeast Regional Energy Symposium (SERES), Georgia Tech, 2013
2. Georgia Tech Research and Innovation Conference, Georgia Tech, 2013
3. Georgia Tech Research and Innovation Conference, Georgia Tech, 2011

#### **REFERENCES:**

1. Dr. Massimo Tavoni, EIEE, [Massimo.tavoni@eiee.org](mailto:Massimo.tavoni@eiee.org)
2. Dr. Valentina Bosetti, Bocconi University, [valentina.bosetti@unibocconi.it](mailto:valentina.bosetti@unibocconi.it)
3. Dr. Ken Caldeira, Carnegie Institution for science, [kcaldeira@carnegiescience.edu](mailto:kcaldeira@carnegiescience.edu)
4. Dr. Valerie Thomas, Georgia Institute of Technology, [valerie.thomas@isye.gatech.edu](mailto:valerie.thomas@isye.gatech.edu)
5. Dr. Rick Van Der Ploeg, Oxford University, [rick.vanderploeg@economics.ox.ac.uk](mailto:rick.vanderploeg@economics.ox.ac.uk)