

Öğr. Gör. Dr. Mustafa Şahin DOĞAN

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<https://msdogan.github.io>

İnşaat Mühendisliği Bölümü

Mühendislik Fakültesi

A Blok, 1. Kat

Aksaray Üniversitesi, Aksaray, Türkiye

ARAŞTIRMA ALANLARI Su kaynakları planlaması ve yönetimi; hidroekonomik modelleme; hidroelektrik optimizasyonu; iklim değişikliği

EĞİTİM **University of California, Davis**, Kaliforniya, A.B.D.

Doktora, İnşaat ve Çevre Mühendisliği Bölümü, Haziran 2019

Yüksek Lisans, İnşaat ve Çevre Mühendisliği Bölümü, Eylül 2015

Dokuz Eylül Üniversitesi, İzmir, TR.

Lisans, İnşaat Mühendisliği, Haziran 2011

YABANCI DILLER İngilizce (İleri Düzeyde)
YÖKDİL: 95 (Kasım 2019)
YDS: 86,25 (Ekim 2019)
TOEFL iBT: 93 (Ekim 2012)

ARAŞTIRMA DENEYİMLERİ **Araştırmacı Öğrenci**
Center for Watershed Sciences, University of California, Davis Danışman: Jay Lund, Ph.D. Temmuz 1, 2015 - Haziran 30, 2019

Center for Watershed Sciences, University of California, Davis Danışman: Josue Medellin, Ph.D. Temmuz 1-31, 2018

Center for Watershed Sciences, University of California, Davis Danışman: Jon Herman, Ph.D. Temmuz 1-Eylül 30, 2016

DAHİL OLUNAN PROJELER

- Assessing climate change impacts on optimal hydropower design and investment strategies. US-China Clean Energy Research Center, Water Energy Solutions and Technologies (CERC-WET) Program Grant #DE-1A0000018 (2016-2021).
- Advancing Hydro-Economic Optimization to Identify Vulnerabilities and Adaptation Opportunities in California's Water System. California Natural Resources Agency (2018).

HAKEMLİ YAYINLAR **Google Scholar Profili:** <https://scholar.google.com/citations?user=K3D94coAAAAJ>

Toplam atıf: 56, *h* index: 5

ORCID ID: <https://orcid.org/0000-0002-3378-9955>

5. Maskey, M., **Dogan, M.S.**, Fernandez-Bou, A.S., Li, L., Guzman, A., Arnold, W., Goharian, E., Lund, J., and Medellin-Azuara, J., (2022). "Managing Aquifer Recharge to Overcome Overdraft in the Lower American River, California, USA" *Water*, 14(966). <https://doi.org/10.3390/w14060966>

4. **Dogan, M.S.**, Lund, J.R., and Medellin-Azuara, J., (2021). “Hybrid Linear and Nonlinear Programming Model for Hydropower Reservoir Optimization” *ASCE Journal of Water Resources Planning and Management*. 147(3). [https://doi.org/10.1061/\(ASCE\)WR.1943-5452.0001353](https://doi.org/10.1061/(ASCE)WR.1943-5452.0001353)
3. **Dogan, M.S.**, Buck, I., Medellin-Azuara, J., and Lund, J.R. (2019). “Statewide Effects of Ending Long-term Groundwater Overdraft in California” *ASCE Journal of Water Resources Planning and Management*, 145(9). [https://doi.org/10.1061/\(ASCE\)WR.1943-5452.0001096](https://doi.org/10.1061/(ASCE)WR.1943-5452.0001096)
2. Nover, D.M., **Dogan, M.S.**, Ragatz, R., Booth, L., J., Medellin-Azuara, J., Lund, J.R., and Viers, J.H. (2019). “Does more storage give California more water?” *Journal of the American Water Resources Association*, 55(3), 759-771. <https://doi.org/10.1111/1752-1688.12745>
1. **Dogan, M. S.**, Fefer, M. A., Herman, J. D., Hart, Q. J., Merz, J. R., Medellin-Azuara, J., and Lund, J. R. (2018). “An open-source Python implementation of California’s hydroeconomic optimization model.” *Environmental Modelling and Software*, 108(October), 8-13. <https://doi.org/10.1016/j.envsoft.2018.07.002>

RAPORLAR

Herman, J., M. Fefer, **M.S. Dogan**, M. Jenkins, J. Medellin-Azuara, and J. Lund. 2018. “Advancing Hydro-Economic Optimization to Identify Vulnerabilities and Adaptation Opportunities in California’s Water System.” California’s 4th Climate Change Assessment, California Natural Resources Agency. Publication number: CCC4A-CNRA-2018-016.

KONFERANS SUNUMLAR

- M.S. Dogan Eylül 2021
“Predicting routed streamflow using machine learning”
Advances in Civil Engineering ACE 2020-21, İstanbul, TURKEY
- M. Maskey, J. Medellin, A.S. Fernandez Bou, A. Guzman, E. Goharian & M.S. Dogan Aralık 2020
“Investigating benefits from additional recharge facilities within the American River Basin”
American Geophysical Union Fall Meeting, Online
- M.S. Dogan & J.R. Lund Aralık 2018
“Evaluating solar PV effects on California’s hydropower generation with a hybrid LP-NLP optimization model”
American Geophysical Union Fall Meeting, Washington, DC (poster)
- M.S. Dogan, M. Fefer, J. Herman, Q. Hart, J. Merz, J. Medellin & J.R. Lund Haziran 2018
“An open-source implementation of California’s hydroeconomic model”
World Environmental and Water Resources Congress, Minneapolis, MN
- M.S. Dogan, I. Buck & J.R. Lund Nisan 2018
“Statewide evaluation of ‘no overdraft policy’ with a hydroeconomic model, CALVIN”
California Water and Environmental Modeling Forum, Folsom, CA
- M. Fefer, M.S. Dogan & J. Herman Aralık 2017
“Sensitivity analysis of California water supply: Assessment of vulnerabilities and adaptations”
American Geophysical Union Fall Meeting, New Orleans, LA (poster)
- M.S. Dogan, I. Buck & J.R. Lund Mayıs 2017
“Ending Overdraft in California under Climate Change”
World Environmental and Water Resources Congress, Sacramento, CA (poster)
- M. Fefer, M.S. Dogan, E. White, J. Herman, Q. Hart, J. Merz, J. Medellin & J.R. Lund Mayıs 2017
“PyVIN: An Open Source Hydroeconomic Model for California’s Water Supply System”
World Environmental and Water Resources Congress, Sacramento, CA (poster)
- M.S. Dogan, E. White, J. Herman, Q. Hart, J. Merz, J. Medellin & J.R. Lund Mart 2017
“Representing California’s Water System with an Open Source Model: PyVIN”
California Water and Environmental Modeling Forum, Folsom, CA
- M.S. Dogan, E. White, J. Herman, Q. Hart, J. Merz, J. Medellin & J.R. Lund Aralık 2016
“An Open Source Hydroeconomic Model for California’s Water Supply System: PyVIN”
American Geophysical Union Fall Meeting, San Francisco, CA (poster)
- M.S. Dogan, K. Singh, J. Medellin & J.R. Lund Kasım 2016
“Interactions of Ending Overdraft and Delta Water Management”
Bay-Delta Science Conference, Sacramento, CA (poster)
- M.S. Dogan, K. Singh, J. Medellin & J.R. Lund Mart 2016
“Effects of Ending Long-Term Overdraft on California’s Water Supply System”
California Water and Environmental Modeling Forum, Folsom, CA

	<ul style="list-style-type: none"> • M.S. Dogan, K. Singh, J. Medellin & J.R. Lund “Tying California’s Water System Together” American Geophysical Union Fall Meeting, San Francisco, CA (poster) • M.S. Dogan, K. Singh, J. Medellin & J.R. Lund “CALVIN: Model and Updates” California Water and Environmental Modeling Forum, Folsom, CA • K. Singh, M.S. Dogan, J. Medellin, R. Esralew, J.R. Lund & J. Viers “Ecosystem Management under Uncertain Hydrologic Conditions” California Water and Environmental Modeling Forum, Folsom, CA • M.S. Dogan, K. Singh, J. Medellin & J.R. Lund “CALifornia Value Integrated Network: Model Updates” California Water and Environmental Modeling Forum, Folsom, CA (poster) 	<p>Aralık 2015</p> <p>Mart 2015</p> <p>Mart 2015</p> <p>Mart 2015</p>
BLOG YAZILARI	<ul style="list-style-type: none"> • Ties Between the Delta and Groundwater Sustainability in California, Dogan M.S., Buck-Macleod, I., Medellin-Azuara, J., Lund, J. California Water Blog. Temmuz 14, 2019. 	
ÖDÜLLER	Akademik Burs (Yüksek Lisans ve Doktora) - T.C. Milli Eğitim Bakanlığı	Kasım 2011
EĞİTİM DENEYİMLERİ	<p>Aksaray Üniversitesi: Öğretilen dersler</p> <ul style="list-style-type: none"> • İNŞ 204 - Akışkanlar Mekaniği • İNŞ 307 - Hidroloji • İNŞ 443 - Akarsu Hidroliği • İNŞ 208 - Mühendislik Ekonomisi • EEM 104 - Bilgisayar Destekli Teknik Resim • İNŞ 111 - Temel Bilgisayar Bilgileri I <p>University of California, Davis: Öğretilen dersler</p> <ul style="list-style-type: none"> • ECI 153 - Deterministic Optimization and Design Ders içeriği <p>Asistan olunan dersler</p> <ul style="list-style-type: none"> • ECI 153 - Deterministic Optimization and Design <p>Misafir eğitmen</p> <ul style="list-style-type: none"> • ECI 273 - Water Resources Systems Engineering • ECI 153 - Deterministic Optimization and Design <p>Çalıştaylar (Workshop)</p> <ul style="list-style-type: none"> • CALVIN Hydroeconomic Modeling Workshop: Bahar 2015, Bahar 2017, Güz 2018, Yaz 2020 https://github.com/msdogan/CALVIN-shortcourse 	<p>Bahar 2022</p> <p>Güz 2021</p> <p>Güz 2021</p> <p>Bahar 2021, 2022</p> <p>Bahar 2021, 2022</p> <p>Güz 2020</p> <p>Güz 2018</p> <p>Güz 2017</p> <p>Kış 2016</p> <p>Güz 2015</p>
PROFESYONEL AKTİVİTELER	<p>Hakemlikler</p> <p>Journal of Water Resources Planning and Management, Water Security, Journal of Hydrology, Environmental Modelling and Software</p> <p>Üye</p> <ul style="list-style-type: none"> • American Society of Civil Engineers, 2013-Bugüne kadar • American Geophysical Union, 2015-Bugüne kadar • California Water and Environmental Modeling Forum, 2015-Bugüne kadar • İnşaat Mühendisleri Odası, Izmir, 2007-2011 	
EĞİTİM DIŞI AKTİVİTELER	<p>Yönetim Kurulu, Turkish Student Association @ UC Davis</p> <ul style="list-style-type: none"> • Üye, 2018-2019 • Muhasebeci, 2017-2018 • Üye, 2016-2017 	

Son Güncelleme: 2022-03-22