

CURRICULUM VITAE

Geotechnical Engineer, Ph.D.



PERSONAL INFORMATION

Name	MAHMUT YAVUZ ŞENGÖR
Adress	ÇANKAYA / ANKARA
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Nationality	TC
Birth Place / Date	ESKİŞEHİR-TURKEY 1977

EDUCATION

- | | |
|---------------|---|
| • Date | 2002–2011 |
| • School | Middle East Technical University Institute of Natural and Applied Sciences |
| • Discipline | Ph.D. , Soil Mechanics and Geotechnical Engineering |
| • Thesis Name | The Deformation Characteristics Of Deep Mixed Columns In Soft Clayey Soils: A Model Study |
| • Date | 1999–2002 |
| • School | Middle East Technical University Institute of Natural and Applied Sciences |
| • Discipline | M.Sc. , Soil Mechanics and Geotechnical Engineering |
| • Thesis Name | Model Pile Tests For Determining The Axial Capacity of Piles In Clay And Sand-Clay Mixtures |
| • Date | 1995–1999 |
| • School | Middle East Technical University Faculty of Engineering |
| • Discipline | B.Sc., Civil Engineering |

PROFESSIONAL EXPERIENCE

- Date 2.3.2021 – to date
Instructor – Çankaya University Civil Engineering Department
- Date Oct 2018 – 28.2.2021
Qa/Qc Deputy Manager Malkara – Çanakkale Motorway Project DLSYJV
- Date Feb 2017 – Oct 2018
Freelance Senior Geotechnical Engineer and Consultant
- Date May 2015 – February 2017
Grontmij (upto Jan 2016) / Sweco Turkey
Senior Geotechnical Engineer
- Date Aug 2012 – May 2015
YÜKSEL PROJE Uluslararası A.Ş.
Specialist Geotechnical Engineer
- Date May 2007 – Aug 2011
Geoekspert Zemin ve Temel Teknikleri Altın Destekleme İnş. San. Tic. Ltd. Şti
Founding Partner – Project and Site Engineer
- Date Sep 2006 – Aug 2011
ZMG Zemin Mekaniği ve Geoteknik Mühendisliği İnş. San. Tic. Ltd. Şti
Geotechnical Engineer
- Date Sep 1999 – Aug 2006
Middle East Technical University Civil Engineering Department
Research Assistant

PERSONAL QUALIFICATION

• Language English

- Computer Programs
 - ✓ MS Office programs
 - ✓ Plaxis (2D, 3D)
 - ✓ Slope-W, Stable, Talren, Msheet
 - ✓ Rocscience programs (Slide, Swedge, Phase2, Roclab, Rocplane)
 - ✓ Sap 2000
 - ✓ Autocad

**PROFESSIONAL
EXPERIENCE &
REFERENCE PROJECTS
INVOLVED**

21.10.2018 – 28.2.2021 Malkara-Çanakkale Motorway Project DLSY JV

Qa/Qc Deputy Manager Geotechnical Specialist

- Involved in Malkara – Çanakkale Motorway project. Responsible for all the geotechnical works on site.
- Involved in the control and revisions for the Geotechnical Design works. (Cuts and fills, foundation systems for 3 ILM viaducts, 42 overpasses, 12 girder underpasses, 34 portal underpasses, 219 culverts (2x2 to 4x4))
- Involved in the control and revisions for landslide prevention works
- Involved in the planning, control and evaluation of site instrumentation works (inclinometers, settlement plates, extensometers, piezometers)

15.02.2017 – 15.09.2018 Freelance Geotechnical Engineer

Project Engineer, Senior Geotechnical Engineer

- Involved in Afyon (Turkey) – Banaz (Uşak-Turkey) EU FUNDED Railway Project. Experience in geotechnical design and design management of different civil engineering systems related to this project including geotechnical design of cuts and fills (70 km), 8 Railway Tunnels, Geotechnical Design of foundations of 9 viaducts and bridges, Design of soil improvements. Specializes in geotechnical design and calculation reports.
- **T2, T3, T4, T5 and T6 NATM tunnels geotechnical final design works (total length: 3613 m, app. Diameter: 13.8 m, excavation area: 138.0 m²)**
- Involved in İhsangazi (Kastamonu-Turkey) – Araç (Kastamonu-Turkey) State Road Project. Experience in geotechnical design of cuts and reinforced cuts.
- Involved in KGM 11. District Erciş (Van-Turkey)-Patnos (Ağrı-Turkey) State Road Project (Km:15+365-33+065) Geotechnical Evaluation Reports
- Involved in KGM 11. District Patnos(Ağrı-Turkey)-Malazgirt(Muş-Turkey) State Road Project (Km:0+000-28+093) Geotechnical Evaluation Reports

18.05.2015- 15.02.2017 Sweco Turkey

Project Engineer, Senior Geotechnical Engineer

Involved in Halkalı (İstanbul) – Kapıkule (Edirne) Railway Project. Experience in geotechnical design and design management of different civil engineering systems related to this project. Specializes in geological survey and geotechnical calculation reports.

06.08.2012- 15.05.2015 Yüksel Proje Uluslararası A.Ş.

Project Engineer, Specialist Geotechnical Engineer

Involved in various national and international engineering projects. Experience in geotechnical design and design management of different civil engineering systems (such as transportation, superstructure, infrastructure, marine structures etc.). Ground- building interaction problems, reinforcement of deep excavation, drilled tunnel design, landslide support structures, land roads, highways, metro, railway, airport, marine buildings, bridges, viaduct, buildings, industrial buildings. Specializes in geotechnical survey and calculation reports.

Rail Systems

- (2.7.2014- 15.5.2015); İstanbul Mecidiyeköy – Mahmutbey Metro Line Mahmutbey, Akşemsettin, Veysel Karani, Kazım Karabekir Stations Excavation Support Systems Calculation Reports
- (5.3.2014 – 12.3.2014); İstanbul Metro 4.Levent-Ayazağa section Levent - Hisarüstü Line Shaft 2 Site Ventilation Building Excavation Support System Calculation Report
- (2.1.2014 – 5.3.2014); Adana 2.Stage Rail Transit System Geological – Geotechnical Research Report
- **(16.5.2013 – 8.7.2013); İstanbul Metro 4.Levent-Ayazağa section Levent-Hisarüstü Line Main & Junction T B M Tunnels Calculation Report (B, C and T type tunnels of excavation areas: 42, 77 and 98 m²)**
- (5.9.2013 – 3.10.2013); İstanbul Metro Kartal - Kaynarca Line Yakacık Station – East Block Excavation Support System Calculation Report
- (21.1.2013 – 20.3.2013); Konya Existing Tramway rehabilitation project detailed design and engineering services Km:13+155-17+849 Cut-Cover Stations Excavation Support Systems Calculation Report
- (8.3.2013 – 20.3.2013); Konya Existing Tramway rehabilitation project detailed design and engineering services geotechnical Interaction of Surrounding Buildings and TBM Tunnel Calculation Reports
- **(10.3.2013 – 20.3.2013); Konya Existing Tramway rehabilitation detailed designing and engineering services geotechnical TBM Tunnel Calculation Reports (diameter: 5.76 m, excavation area: 26 m²)**
- **(16.05.2013 – 07.06.2013)Ankara Metro Supervision Consultancy and Engineering Services AKM – Gar Connection TBM Tunnel Calculation Report (diameter: 5.76 m, excavation area: 26 m²)**
- (25.4.2013 – 31.5.2013); Ankara Metro Supervision Consultancy and Engineering Services Çayyolu Depot Site Geotechnical Project Report

Highways – Railways – Bridges – Tunnels

- (22.4.2014 – 23.10.2014); General Directorate of Highways Dursunbey – Harmancık State Road Km:36+200-36+425 Tezlik Landslide Geotechnical Measures Project Report
- (1.3.2014 – 1.7.2014); Turkmenistan - Turkmenbashi Ports & Land Reclamation Project Pre-evaluation Analysis
- (12.8.2013 – 6.12.2013); Sincan – Çayırhan - İstanbul Railway Project Survey, Design and Engineering Services, geotechnical stability works for critical cut and fill sections
- **(10.7.2013 – 25.7.2013); Trabzon-Gümüşhane State Road Maçka Variant State Road split, filling, tunnel, viaduct, junction and retaining structures Maçka Tunnel Project Calculation Report (NATM, total length: 2800 m, app. Diameter: 11.0 m, excavation area: 108.0 m², twin tube)**
- **(1.4.2013 – 30.4.2013); Nurdağ – Baspınar Stations Railway (Km: 76+400.000 – 131+518.808) Tunnel T1–T6 Geotechnical Calculation Reports (NATM, total length: 17185 m, excavation area: 132.0 m²)**
- (08/2013 - 11/2013); Bergama – Soma Junction. – Turanlı – 14.Region Road Survey, Design and Engineering

- Services (Km:0+000 – 39+957.986) Kırcalar, Aşağıdere Highway Bridges Geotechnical Evaluation Reports
- (1.8.2012 – 10.8.2012); Yakakent-Gerze State Road split, filling, tunnel, viaduct, junction Yalıköy Access Road (Km: 0+700 – 0+900) Reinforced Earth Retaining Walls Geotechnical Project Report
- (18.7.2012 – 12.8. 2012); Yakakent-Gerze State Road split, filling, tunnel, viaduct, junction Güzelceçay Highway Bridge Geotechnical Evaluation Report
- (14.8.2012 – 19.9.2012); Bartın – Amasra – Cide State Road Çakraz – Kurucaşile split, filling, tunnel, viaduct, junction (km: 24+684.55 – 49+972.58) Stability Analysis Reports for Critical Cut & Fill Sections
- (27.9.2012 – 17.10.2012); Bartın – Amasra – Cide State Road Çakraz – Kurucaşile split, filling, tunnel, viaduct, junction (km: 24+684.55 – 49+972.58) Büyükdere Highway Bridge Geotechnical Evaluation Report
- **(19.12.2012-5.1.2013); Bartın – Amasra – Cide State Road Çakraz – Kurucaşile split, filling, tunnel, viaduct, junction (Km: 24+684.55 – 49+972.58) T1 Tunnel (Km: 25+632.00 – 26+600.00) Geological and Geotechnical Project Report (NATM, excavation area: 106.0 m²)**
- (3.7.2013 – 11.7.2013); Bursa Periphery Highway – Yalova – Turanköy Junction (Km: 2+000 – 27+148) Samanlı Access Road (Km: 0+000 – 6+340) Km: 0+730 - Km: 2+529 Fill Section Consolidation Settlements Evaluation Reports
- (25.9.2012 – 15.1.2013); Kırık – İspir State Road (Km: 63+880.00 – 79+663.89) Yukarı Özbağ, Şaban, Çoruh Highway Bridges Geotechnical Evaluation Reports
- (9.10.2012 – 7.11.2012); Gerze – Sinop State Road Yaykıl Highway Bridge (Km: 131+212.350) Geotechnical Evaluation Reports

Public Buildings

- (7.2.2013 – 10.3.2013); İstanbul 3.Group Culture, Sport, Service and Car Park Structures Sile Culture and Art Center, Sultangazi Youth Center Excavation Support Systems Calculation Reports

09.2006 – 08.2011 ZMG Zemin Mekaniği ve Geoteknik Mühendisliği Uluslararası A.Ş.

Project Engineer, Geotechnical Engineer

Involved in various national and international engineering projects. Experience in geotechnical design and design management of different civil engineering systems (such as transportation, superstructure, infrastructure etc.). Soil – structure interaction problems, reinforcement of deep excavation, dewatering, landslide support structures, land roads, highways, metro, railway, bridges, viaduct, buildings, and industrial buildings. Specializes in geotechnical survey, instrumentation and calculation reports

Rail Systems

- İstanbul Marmaray Mass Transport Project Yedikule-Yenikapı, Yenikapı, Sirkeci, Üsküdar, Ayrılıkçeşme Stations Geotechnical Parameters Reports and Project Consultancy (20.08.2005-20.06.2006)
- İstanbul Marmaray Mass Transport Project Sirkeci Station South Entrance Geotechnical Parameters Report (20.09.2009-20.10.2009)
- İstanbul Marmaray Mass Transport Project Üsküdar Station Dewatering Project (4.06.2008-05.07.2008)
- İstanbul Marmaray Mass Transport Project Yenikapı-Yedikule-Ayrılıkçeşme Stations – Reports for Displacement Control and Anchorages (17.01.2009-15.06.2010)
- Samsun Light Railway Transportation System Geotechnical Evaluation Reports (02.02.2009-18.07.2009)

Highways – Railways – Bridges – Tunnels

- Eskişehir Railway Urban Passage Project Retaining Structures Project (02.06.2008-30.07.2008)
- Adapazarı-Karasu Railway Line Geotechnical Evaluation Report (01.05.2011-30.06.2011)
- Haliç Mass Transport Project Pre-evaluation Works (04.08.2007-05.09.2007)

Excavation Support Systems

- Kazakhstan Esentai Tower Excavation Retaining Structure (Anchored Reinforced Concrete Wall) Project (5.08.2005-10.09.2005)
- Kazakhstan Kazkommertsbank Building Excavation Retaining Structure Project (5.6.2006-14.07.2006)
- Kazakhstan Parkview Tower Excavation Retaining Structure Project (15.09.2006-04.11.2006)
- Kazakhstan Almati Hotel Excavation Retaining Structure Project (03.11.2006-5.12.2006)
- Kazakhstan Mesa Plaza Excavation Retaining Structure Project (11.04.2007-31.08.2007)
- Sincan Industrial Zone Permanent Soil Nailed Retaining Wall Project (3.08.2006-20.08.2006)
- Ankara – Esenboğa Airport Simulation Building Water-tight Diaphragm Wall Project (04.03.2007-05.05.2007)
- Undersecretariat for Defense Industries New Service Buildings Excavation Retaining Structures Project (15.05.2007-30.07.2007)
- Bilkent University Faculty of Engineering Additional Building Excavation Retaining Structures Project (19.04.2007-30.05.2007)
- Ankara FW Marriot Hotel Building Excavation Retaining Structures Project (20.02.2008-30.06.2008)

Landslide Measures, Foundation Reinforcement, Instrumentation

- 20 Kasım and Göynüklü Buildings (Mudanya-Bursa) Landslide Measures Project (01.06.2006-10.09.2006)
- Eti Maden Kırka Bor Facility Penta 4 Site Landslide Measures Project (15.03.2009-20.10.2009)
- Ankara – Keçiören Municipality Aktepe Site Landslide Survey Works (05.04.2010-20.07.2010)
- Şebinkarahisar 10. State Road highway landslide measures Project (05.05.2009-11.07.2009)
- Samsun – İlkadım Mehmetçik School Building Landslide Measures Project (05.08. 2012-20.09.2012)
- Bodrum Yahşikent Villas Underpinning Project (04.07. 2007-20.08.2007)
- Efes Pilsen Konya Çumra Facility Germination Building Underpinning Works – Project and Consultancy (10.06.2007-10.06.2010)
- Ankara – Keçiören – Pursaklar 90744 - 2 T3-5 Building Stabilizing and Strengthening project for cut slopes (06.05.2009-16.07.2009)
- Zonguldak – Ereğli – Gülüç Site Reinforcement Project (10.02.2011-31.07.2011)
- İstanbul Shipyard Service Building Foundation Reinforcement Works (01.03.2009-28.03.2009)
- İstanbul – Tuzla Havelsan Facility Geotechnical Evaluation and Foundation Reinforcement Project Report (05.05.2009-01.08.2009)
- Efes Pilsen Ankara – Kazan Facility Fermentation Building Instrumentation Works (Inclinometers, Extensometers, Piezometers, Optical Measurement System) (30.06.2009-15.10.2010)
- ODTÜ, Çamlık Buildings Instrumentation Works (05.10.2006-15.04.2008)
- Ankara – Çankaya – Dikmen ParkVadi Building A, B, D Blocks Excavation Retaining Structures Project and Instrumentation Works (30.05.2007-30.06.2011)
- Libya – Tripoli Conference Complex Tunnel Project Bearing Capacity Geotechnical Evaluation Report

(01.03.2010-10.03.2010)

- Kavşakbendi Dam Left Bank Spillway and Body Excavations Stability and Retaining Works Report (22.02.2010-15.10.2010)
- Sakarya State Hospital Soil Investigation Works Evaluation Report (15.03.2009-15.10.2009)
- Uşak State Hospital Construction Geotechnical Report (21.08.2009-15.09.2009)
- Hayat Plaza Foundation Reports (03.10.2010-30.10.2010)
- Ministry of Customs and Trade New Service Buildings Foundation Reports (19.03.2010-15.07.2010)
- Ankara – NATA Shopping Mall (IKEA) Foundation System Geotechnical Evaluation Report (15.08.2008-05.09.2008)
- Batıkent Atlantis Buildings Foundation System Project (03.08.2009-05.09.2009)
- Haymana Çağ Hayme Sultan Thermal Hotel Facility Geotechnical Report (06.11.2009-25.11.2009)
- Ankara – Sincan Merkez Mosque and Shopping Mall Geotechnical Report (02.11.2009-01.12.2009)
- Konya Industrial Zone Science Center Buildings Foundation Evaluation Report (01.07.2010-16.08.2010)
- İstanbul – Beylikdüzü Media-Markt Building Retaining Walls Evaluation Report (05.08.2010-05.10.2010)
- Çankırı Shopping Mall Construction Site Dewatering Projects (24.11.2009-17.12.2009)

Site Consultancy and Construction Works

- T.C. İş Bankası Ürgüp Şubesi – Construction works of micro-piles and anchorages for excavation retaining structures (8.2007-10.2007)
- Efes Pilsen Konya Çumra Facility Germination Building Underpinning Works – Construction of Micro-piles (10.2007-01.2008)
- Eti Maden Kırka Bor Facility Penta 4 Site Landslide Measure Works – Construction of Permanent Ground anchorages and Instrumentation (Inclinometer) Works (05.2009-12.2009)
- Ankara – Keçiören – 31596 – 5 Pi-Em Enerji Building –Construction of Permanent Soil Nails and reinforced Concrete Retaining Walls for Excavation Support System (10.2009-11.2009)
- Ankara – Keçiören – 4991 – 19 RFM Dialysis Center – Construction of Excavation Retaining Structures (05.2010 – 08.2010)

08.1999 – 08.2006 Middle East Technical University, Civil Engineering Department

Research & Teaching Assistant in Geotechnics

Involved in various geotechnical engineering lectures (soil mechanics CE363, foundation engineering CE366, soil improvement CE464, deep excavations & retaining structures CE569, Earth Structures CE 465) as a teaching assistant.

PUBLICATIONS

1. “Derin bir Heyelan Stabilizasyonu” Conf. Proc. In 16th. National Conf. on Soil Mechanics and Foundation Engineering , 13-14 October 2016, Erzurum, Turkey.
2. Landslide Stabilization by Piles: A Case History and in-depth Review, Conf. Proc. on 18th ICSMGE (Int. Conf. on Soil Mechanics and Geotechnical Engineering) 2013, Paris.
3. ‘Settlement Behaviour of Foundations on Soils Improved by Columns’, Conf. Proc. on 10th Int. Congress on Advances in Civil Eng., 17-19 October 2012, METU, Ankara, Turkey.
4. ‘Derin Karıştırma Kolonları ile İyileştirilmiş Yumuşak Kil Zeminin Deformasyon Özellikleri Üzerine Bir Model Deney Çalışması’, 4. Geoteknik Sempozyumu, Aralık 2011, Adana, Turkey.
5. ‘The Deformation characteristics of Deep Mixed columns In Soft Clayey Soils: A Model Study’, *PhD Thesis*, Feb 2011, 110 pp., METU.
6. ‘Bir Heyelan Stabilizasyonu Vaka Analizi’, 5. Prof. İsmet Ordemir’i Anma Konferansı ve Geoteknik Sempozyumu Bildirisi, 23 Kasım 2009, Ankara, Turkey.
7. ‘Güç Bir İksa Vakası’, 4. Prof. İsmet Ordemir’i Anma Konferansı ve Geoteknik Sempozyumu Bildirisi, 30 Kasım 2007, Ankara, Turkey.
8. ‘Model Pile Tests for Determining The Axial capacity of Piles in Clay and Sand-Clay Mixtures’, *MSc Thesis*, Dec 2002, 58 pp., METU.