

# Attila Fustos

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Date of birth: 1978  
Nationality: Hungarian  
Gender: male



## WORK EXPERIENCE

**Samsung C&T** 1/2012-  
**Manager, Seoul, HQ, South Korea** - Civil Engineering Centre, Road and Railroad Team

Bid preparation for major infrastructure projects: 300km+ railway line, ports, mining facility  
Working with local partners on site by relocating to **UAE, Australia and Singapore**

Technical support for construction of highway and metro projects in **UAE, Turkey and Korea**

Gap year 10/2010-1/2012  
I obtained my goal of **fluency in Spanish** by studying and living in Mexico and Guatemala

**Mott MacDonald Group Limited** 3/2008-10/2010  
**Chartered Bridge Engineer, London, UK** - Metros & Civil Division

Design, independent check and assesment of structures in the **city of London, UK and UAE**  
Including 80m span arch road- and railbridges, jetty structure on the Thames

Quality, Environment and Safety (QES) Management System Representative

Fomterv Ltd. 7/2004-3/2008  
**Bridge Designer Engineer, Budapest, Hungary** - Department of Bridge Engineering

Project management and site representative role on construction of for bridges, metro stations  
Desing including **312 m span world record holder arch bridge construction** and transportation

## PROFESSIONAL STATUS

Chartered Engineer and Member of the Institution of Civil Engineers (**CEng, MICE**)

## EDUCATION

**Budapest University of Technology and Economics, Hungary, MSC** 1998-2005  
Faculty of Civil Engineering, **Structural engineer**

**Corvinus University of Budapest, Hungary, MSC** 2000-2006  
Faculty of Business Administration, **Management and Organization**

**Cracow University of Technology, Poland, CEEPUS Scholarship** 2001  
Institute of Computer Methods in Civil Engineering, interim research project with relocation

## LANGUAGE CAPABILITY

English: fluent, Spanish: competent, Hungarian: mother tongue

## KEY QUALIFICATIONS

**Over seven years' experience** in the design and construction of **major civil engineering transport infrastructure**, including: bridges, underground stations, underpasses, ports, railways and highways.

Two and a half years' **experience working in the UK** on British and overseas projects with one of the biggest engineering consulting firm. From 2012 I am based in Seoul and support bid proposals or give technical support for major construction projects working for the company **9th on Interbrand's Best Global Brands**. Supporting different projects I moved different cities like Perth, Singapore and Abu Dhabi for at least a month period. My role is support the bidding team, consult with the client, authorities, designers and our joint venture partners.

## PROFESSIONAL STATUS

Chartered Engineer and Member of the Institution of Civil Engineers (**CEng, MICE**)  
Chartered Member of the Chamber of Hungarian Engineers  
Member of the European Federation of National Engineering Associations (Eur Ing)  
Member of International Association for Bridge and Structural Engineering (IABSE)  
Construction Skills Certification Scheme Black Construction Site Manager Card (CSCS)

## ENGINEERING SPECIALIZATIONS

**Design contribution:** from feasibility study to construction design, assessment and strengthening.

**Structure types, construction processes:** arch bridges, integral bridges, post-tensioned concrete bridge, prestressed beam - concrete composite, steel girder - concrete composite.

**Carried load types:** pedestrian, road, special industrial truck, rail and light rail bridges.

**Special design expertises:** bridge lifting and transportation, pipe-jacking, hydraulic bed bridge lifting, incremental launching girder calculation, top-down construction method for underground station construction (Milan method), bridge load test calculation, strain gauges, cable stressing process calculation, scaffolding and temporary work for bridge construction.

**Engineering management:** project management in structural and general construction projects, bidding and tender documentation, British quality management system for engineering process, joint ventures, design consultant management, construction contracts.

**Computer skills:** various engineering applications, computer programming C++ and other computer languages, **MS Office with Visual Basic programming**.

**Codes and Standards:** several local and international engineering standards and design codes

## PUBLICATIONS

Nasztanovics F., Füstös A., Sapkás Á., Nagy Zs. and Horváth A.: **Sensitivity analysis of Pentele bridge**, *Journal article (Hungarian)*, Építés-építészettudomány, pp. 103-117, 2008, DOI: 10.1556/EpTud.36.2008.1-2.5

Horváth A., Füstös A., Nagy Zs., Nasztanovics F., Sapkás Á.: **Erection of Dunaújváros Danube Bridge**, IABSE Symposium on Responding to Tomorrow's Challenges in Structural Engineering, Budapest, 13-15 September 2006.

Nasztanovics F., Füstös A., Bojtár I.: **Strength analysis of brain aneurysm**, In: I. Hungarian Conference on Biomechanics, pp. 303-313, Budapest, 11-12 Jun 2004.

Bojtár I., Nasztanovics F., Füstös A.: **FEM analysis of brain aneurysm**. IX. MaMeK, Hungarian National Conference on Mechanics, Miskolc, 27-29 August 2003.

Füstös A., Nasztanovics F.: **Analysis of dental implants under dynamic loads**. Institute of Computer Methods in Civil Engineering - Seminar, Cracow, 8 November 2001.

Bojtár I., Nasztanovics F., Füstös A., Divinyi T., Szűcs A.: **Analysis of dental implants under dynamic loads**. 13th Inter-Institute Seminar, Vienna, 26-28 October 2001.

Füstös A., Nasztanovics F.: **Stress distribution in a plate with an elliptical hole**. 12th Inter-Institute Seminar on Nonlinear Computational Mechanics, Budapest, 27-29 October 2000.

## DETAILED EXPERIENCE RECORD, ROLES AND RESPONSIBILITIES

Company	Project, role identity	Date	Value or main typical data	Personal responsibilities
Mott MacDonald Ltd. Metros & Civil Division, Bridge Department, Chartered Bridge Engineer London, 3/2008-10/2010	Quality, Environment and Safety (QES) Management System Representative, Bridge Department, Head office	12/2009-10/2010	QES for approximately 70 staff members and 50 ongoing projects	I worked with the divisional manager and acted as the focal point for the coordination of activities relating to the implementation and maintenance of the company's QES system at the local level. My role involved <b>communicating changes to the system</b> with advice on implications on working practices.
	Support member for the new Project Information Management System (PIMS)	12/2008-11/2009	Assistant of approximately 10 staff members	Delivering the introduction of a new management system to the department which involved the <b>reorganisation of the information processes</b>
	Pudding Mill Lane, <b>Crossrail</b> , new underground line, London	9/2009-10/2010	A 19m span single supported bridge and a 19m span <b>integral bridge</b> constructed for Crossrail during the Olympics in London in the city centre for heavy and DLR (Docklands Light Railway) rail lines	Designer of the bridges according to <b>British and DLR standards</b> , in accordance to the <b>Crossrail project terms and conditions</b> .
	Margit Bridge refurbishment, Budapest, Hungary	2-3/2009	Bidding for the historical bridge reconstruction in Hungary	I contributed towards the preparation of the <b>bid document</b>
	Accommodation Bridges, M4 Highway, UK	2-4/2009	Series of 36m span <b>post-tensioned</b> concrete accommodation bridges, constructed in 1970	Bridge assessment calculation and <b>possible deterioration analysis</b> . Assessment report preparation according to the British Highway Agency design manual ( <b>BD</b> )
	Boulevard Bridges, Al Raha Development, <b>United Arab Emirates (UAE)</b>	8/2008-2/2009	<b>12 pieces of independent 80m long span network arch bridges</b> which comprised different decks: 3-5 lanes carriageways or light railway line above a channel	Independent design check with the application of the <b>American Association of State Highway and Transportation Officials (AASHTO)</b>
	Belvedere Access Bridge, on the bank of the Thames, London, UK	5-8/2008	7 span, 115m continuous prestressed beam concrete composite bridge structure in <b>maritime area</b> , carrying <b>industrial truck</b> traffic	Designer of the bridge according to the British Standard (BS).
	Ryde Pier, Isle of Wight, UK	3-5/2008	120m multi-span concrete approach bridge, carrying pedestrian and railway traffic, substructure constructed in the <b>early 19th century</b>	Structure assessment and strengthening report according to BS, as a member of the team.
	Fovam underpass, Budapest, Hungary	9/2007-3/2008	8.2 million GBP, whole junction reconstruction connecting different level perpendicular tram lines. The underpass is right next to historic river bridge abutment carrying the main water supply for Budapest	General project manager assistant and structural designer. I <b>assisted the general design project manager</b> during the reconstruction process. The whole refurbishment included the <b>site supervision and consultation with the stakeholders</b>
	Bocscai underground station, <b>Metro 4 new underground line</b> (M4), Budapest, Hungary	1-9/2007	18m deep, 20m wide and 130m long box underground structure, construction type: top-down (Milan) method, situated between high buildings.	Designer of the station and design assistant manager Site representative on behalf of the designer
Fomterv Ltd. Bridge Department, Bridge Design Engineer Budapest, 7/2004-3/2008	Tetenyi underground station, M4, Budapest, Hungary	9/2007	Half-cone shaped light weight steel roof structure	I <b>carried out a feasibility design for the structure</b>
	Dunakeszi railway bridge	10/2007	26m length, single span, <b>steel-girder concrete topping composite bridge</b> over a railway line	Assessment and strengthening documentation of the bridge
	Szolnok footbridge	8-9/2007	200m span length pedestrian river bridge	<b>Feasibility study</b> working together with the architects

Company	Project, role identity	Date	Value or main typical data	Personal responsibilities
Fonterv Ltd. Bridge Department Bridge Design Engineer Budapest, 7/2004-3/2008	Pentele river bridge on the Danube at Dunaújváros, Hungary	8/2004-7/2007	132 million GBP. main span: 312m, 50m height, 43m width, 8600 tons total length: 1682m Its main span is <b>world record holder</b> in its type; it is <b>the longest spanning</b> Nielsen-Lohse type arch bridge in the world. The transportation (erection) of the main span was a <b>unique engineering task</b> in this scale. The approach bridge is a continuous multi-span lunched box-girder.	I worked on the design of the bridge <b>from the beginning of the design till the opening procedure</b> . Detailed design of the transportation process, the <b>floating procedure of the barges</b> for the transportation process with strain gauges Detailed mechanical analysis and optimization of different parts of the structure Independent check of the <b>cable stressing process</b> Steel assembly and construction modelling with <b>pioneer full 3D steel structure modelling</b> Calculation of the <b>incremental launching process</b> <b>Project manager of the calculation team</b> for the load test procedure (strain gauges and simultaneous survey)
	M7 highway bridges	3/2006	3 bridges 40m span, highway bridges	Assessment of bridges
	Duna Tower underpass	7-9/2006	20m length, trapeze section of 4m height, 6m width, <b>pipe-jacked underpass</b> with prefabricated structural elements	Conceptual design of the tunnel
	Esztergom-Sturovo River Bridge connecting the Hungarian-Slovakian sides	9/2006	Main span: 250m, 3D modelling, layouts for design competition, green field conception design	<b>Feasibility design of a country border bridge</b> , team member
	Szolnok-Mezotur railway underpass	3-5/2005	Underpass bridge for a railway station, span 12m depth 6m, <b>European Union project</b>	Implementation design of the underpass tunnel
Gedeon Richter Plc.	M7 highway bridge	7-9/2004	40m span, precast beam in-situ filled concrete deck accommodation bridge	Design and <b>CAD detailing</b> of the bridge
	Summer placement, Cadet engineer	7-8/2003	Factory refurbishment projects, 4 small projects, sum 50000 GBP	<b>Cost estimate, tender calculation</b> , project management contractor site representative
StuSoft Hungary Ltd	Mesh generation programming	7-10/2002	Special mesh algorithm using <b>C++</b> for a Finite Element (FEM) program	Programming a special procedure for the software
	Strength analysis of <b>brain aneurysm</b>	9/2002-10/2004	Coupled (mechanical-flow) 3D FEM analysis	Research team member
Technical University of Budapest	CEEPUS Scholarship, Cracow, Poland	10-11/2001	Research study at the Institute of Computer Methods in Civil Engineering Department	Research team member
	Analysis of <b>dental implants</b>	9/2000-9/2002	Material and support condition nonlinearity, 3D analysis	Research team member
	Stress distribution around an elliptical hole	10/1999-9/2000	Comparing the analytical, FEM, Distinct Element Method solutions	Research team member