



Europass Curriculum Vitae



Personal information

Surname(s) / First name: **Timchenko Igor**

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Work experience **Structural Engineer & Consultant**

Name and address of last employer

-CUBICON Ltd., 13, Gelovani Ave., 0159, Tbilisi, Georgia. Senior FEA Engineer, since Sep 2018;
-Ilia State University-SDSU Georgia, Professor Assistant, since May 2018;
- LLC Optimal Group +. 17a Chavchavadze, ave, 0179 Tbilisi, Georgia. Expert, since 2018.
-'Progresi Ltd' Engineering Center. 14a, Kavtaradze str. 22nd floor, 0183 Tbilisi, GEORGIA -
Principal Structural Engineer, since Feb 2016.

Mar 2009-Jan 2016:

Senior Structural Engineer, QA/QC, **Hill International Azerbaijan Ltd.**

Consulting services in structural design, construction, quality control, supervision for Baku Flame Tower Project (BFTP) <http://www.skyscrapercity.com/showthread.php?t=875700>; for Hotel&Spa complex in Gala Alti; for Access Bank Natavan Office building. Design review of MOT building, QA/QC for Yeni Hayat Complex & for Hayat Palace Luxury Residence in Baku; Consulting services for Baku Tower Project, Baku, Azerbaijan.

Hill International (Azerbaijan) Limited (www.hillintl.com). 15, Nobel Ave., 17th floor, #113, Yeni Hayat, Azure Business Center, AZ1025 Baku, Azerbaijan, Tel: +994 12 488 65 37/38

Type of business or sector Private

Education and training

-Seismic Hazard and Time-History Selection & Modification for Compatibility with Building Code, Nov 4-8, 2019, Supported by World Bank, Ilia State University, LLNL.
-Third Country Training Program on Earthquake Engineering, Istanbul, Turkey, 2003.
-Ph.D. in Civil Engineering, 1989, Polytechnic Institute of Tashkent;
-Moscow Institute of Foreign Languages (English) by correspondence, 1986-1988;
-Post-graduate study, 1979-1982, Institute of Structural Mechanics & Earthquake Engineering (SMEE), -- Georgian Academy of Sciences;
-Technical translator (French), 1977-1980, Georgian Polytechnic Institute;
-Structural Engineer, 1974-1979, Georgian Polytechnic Institute, Faculty of Industrial & Civil Construction.

Personal skills and competences

Main field - numerical modelling of structures, strength calculations, technical expertise of structures, seismic codes, value engineering, strengthening of structures, structural design, quality control.
Other fields – soil-structure interaction, site specific seismic response analysis, engineering analysis of earthquake consequences, slope stability analyses.

Career Highlights Project Name-Responsibilities/Tasks:	<ul style="list-style-type: none"> -Multi-storey Complex „Batumi Plaza“ (ADG Ltd, 2006-2008).-Chief Str.Eng/Calculations, shop drawings, value eng.,supervision; -Multi-storey Bldg “Sakhli Auztan“ (ADG Ltd, 2006-2008).- Chief Str.Eng/Calculations, shop drawings, value eng.,supervision; -Water Reservoir in Batumi (Salibauro) – slope stability analyses (with Progresi Ltd, 2008); -RC Water Reservoir structural analyses in Tbilisi (Vashlijvari), 2006, Sakkalakproekti; -Multi-storey Bldg (Tbilisi, 6, Bulachauri str, 2006-2007).- Chief Str.Eng/Calculations, shop drawings, value eng. supervision; -US Embassy New Office Building in Tbilisi (J.A.Jones & Aysel Companies, 2003-2004.)- Str.Eng./Shop drawings; -Tbilisi (Gidani), RC water sewerage collector rehabilitation- pipe strength analyses), 2002; - Rehabilitation of Hotel Marriott-Tbilisi building (JSC Hotel Tbilisi, 2000).- Str.Eng/Calculations; -Multifunctional building Marriott-Courtyard on the Freedom Square, Tbilisi (JSC Hotel Tbilisi, MN-Project, 2000).- Str.Eng/ Consulting, calculations, shop drawings; -Residential complex, Tbilisi, Vake, Kipshidze str. (KURORTPROJECT, 2002-2004).- Numerical analyses, value eng. supervision; -Rehabilitation of the Goethe Institute, Tbilisi (Sakbinremproekti Ltd., 2002)-Calculations, consulting; -Beachfront building complex in the Sochi city, Russia (Kavgioprotrans, 1998-2002).- Numerical analyses, modeling and visualization; -Reconstruction the “Bank Republic” head office in Tbilisi (Archstudia Ltd, Inst. of Struct. Mech. & Earthquake Engineering 2001-2003).- Numerical analyses, technical expertise, value eng.; -Structural analysis, technical drawings of the Tbilisi Airport Observation Tower (Archstudia Ltd, 2001).- Numerical analysis, shop drawings; -Tunnel structure Tbilisi-Batumi (“Transproject”, 2005)-Numerical analyses; -Rehabilitation of Dynamo Stadium, Tbilisi, 2005.- Numerical analyses, technical expertise; -Rehabilitation of Central Railway station, Tbilisi, 2007-2008.-Structural analyses, technical expertise; -Palace of Sport, Tbilisi (TBILZNIIEP, 2007).- Numerical analyses, technical expertise; -Multistorey residential buildings: I.Chavchavadze ave. (Archstudia Ltd, 2003); A.Kazbegi ave. (“Kultmsheni” Ltd., 2002-2003), in Academy Town (“Sakkalakmshenproeqti”, 2003); Design of bearing walls and bridge supports (“Sakgzaproekti, 2002-2003); Technical expertise of damaged buildings at the 2002 Tbilisi EQ (Inst. of Struct. Mech. & Earthquake Engineering, MN-Project, 2000-2003).- Design of foundations for res. buildings in complex geological conditions, Sochi, Russia (Kavgioprotrans, 2003) and many others. and other Projects- Numerical analyses, value eng., technical expertises.
Employers	<p>Hill International Ltd., ADG Ltd. J.A.Jones & Aysel Companies, Progresi Ltd., JSC Hotel Tbilisi, MN-Project, KURORTPROJECT,Sakbinremproekti Ltd., Kavgioprotrans, Archstudia Ltd., Inst. of Struct. Mech. & Earthquake Engineering,Transproject Ltd., TBILZNIIEP, Kultmsheni, Sakkalakmshenproeqti, Sakgzaproekti, GIPN Ltd. etc.</p>
Other Projects, Responsibilities/Tasks: Review of shop drawings:	<p>Design review of RC building in Gonio (Western Georgia) considering real quality of materials, recommendations on strengthening (Apr 2008);</p> <p>Design review of RC building in Tbilisi for the purpose of steel economy (Apr 2008);</p> <p>Design review (shop drawings, calculations) of RC building of Business Center in Uznadze str., Tbilisi (Designed by “Artstudio”) (Aug 2008);</p> <p>Design review of Borjomi Health Club Spa and Hotel (Designed by “PROTEK”, Turkey (Oct 2007);</p> <p>Design review of “Kobuleti Resort Hotel And Spa” (Designed by “PROTEK”, Turkey (Oct 2007).</p>
Supervision, Quality Control:	<p>Central Railway Station in Tbilisi city- quality of structures, recommendations on strengthening (Dec, 2006);</p> <p>Palace of Sport building in Tbilisi- quality of structures, bearing capacity with installation of additional suspended equipment (Jan 2008);</p> <p>Frame building, Mtatsminda district, Tbilisi- technical inspection, recommendations on strengthening (May 2008);</p> <p>Quality inspection of historical building in Rustaveli str, Tbilisi, recommendations on strengthening measures (Sep 2008);</p> <p>Quality control of RC buildings, Vazha Pshavela ave. Tbilisi (Jun 2007);</p> <p>Quality supervision of RC building in Bagebi, Tbilisi (2007-2009);</p> <p>Quality supervision of RC building in Bulachauri str, Tbilisi (2007-2009);</p> <p>Baku Flame Tower Project – inspection of construction quality. (2009-2013);</p> <p>Yeni Hayat Multifunctional Complex, Baku, Azerbaijan (2014-2015);</p> <p>Hayat Palace Luxury Residence, Baku, Azerbaijan (2014-2015).</p>

Value engineering (review of design and ideas on how to change it for a more economical design):

Two-story industrial building in Tbilisi- review of existing structure, development of strengthening measures considering new seismicity and new equipment (Dec, 2007);
 Review of design of “Digmis Veli” building in Tbilisi considering two additional floors, optimization of foundation design, diaphragm layout (Jun 2007, Sep 2008);
 Central Railway Station in Tbilisi city- review of original design together with new rehabilitation project (Jul, 2008);
 Design review of RC building in Bakradze str., Tbilisi (Designed by “Seismo”) for the purpose of materials economy (Aug 2008);
 Design review of RC building in Lagidze str., Tbilisi for the purpose of optimization in case of two additional levels (Sep 2008);
 RC Buildings in Vashlijvari, Tbilisi (Block C) - review of design for the purpose of optimization (Oct 2008);
 RC Buildings in Vashlijvari, Tbilisi (Block B) - review of design for the purpose of optimization (Nov 2008);
 Review of design, RC building in Ketevan Tsamebuli str, Tbilisi, case of two additional levels; development of reinforcement measures (Jan 2009);
 Review of design, residential complex in Saakadze sq, Tbilisi, Block 1-10, with actual data on concrete quality and redevelopment of Block 1-2 (Jun 2006).

Numerous Residential, Public & Sportive Buildings and Complexes, Bridges, Tunnels, Retaining Walls- see [Annex](#).

Structural Numerical Analyses of Building and Structures:

- Analysis of soil dynamic response at the Apr 25, 2002 Epicentral Earthquake in Tbilisi with map compilation (GIS) of the territory of Tbilisi (Center of Applied Geophysics, Engineering Seismology & Seismic Protection of Structures, 2002-2003);
- Development of engineering-seismological data base. Collection of world-wide recordings of earthquakes, statistical processing, detection of parameters of nonlinear properties of soils during strong ground motion (ongoing). - Center of Applied Geophysics, Engineering Seismology and Seismic Protection of Structures, Georgian Geophysical Society.
- Development of software and processing of records of the Racha, (1991), Tbilisi (2000-2002) earthquakes (Institute of Structural Mechanics and Earthquake Engineering, Scientific Academy of Georgia).
- Development of software for generation of artificial accelerograms of earthquakes. Institute of Structural Mechanics and Earthquake Engineering, Scientific Academy of Georgia (1997-2003).
- Software for expert assessment of vulnerability of structures for insurance purposes (Center of Applied Geophysics, Engineering Seismology and Seismic Protection of Structures, Georgian Geophysical Society, 2001).
- Seismic Hazard Assessment for Big Cities in Georgia Using the Modern Concept of Seismic Microzonation with Consideration of Soil Non-linearity. 1998, Two years, INTAS-GEORGIA 97-0870.
- Development of Practical Methodology of Earthquake Insurance in Georgia with Consideration of its Economical Peculiarities. 1999-2002. USAID, Eurasia Foundation.
- Assessment of Seismic Hazard of the Poti Port Breakwater Site Location. 1999. TACIS SERVICE CONTRACT No 98-0441; Project No TNGE 9801.
- Seismic Risk in large Cities of Caucasus. Tools for Risk Management. NATO SfP 974320 2001-2005.
- Caucasian Seismic Information Network for Hazard and Risk Assessment (CauSIN)-ISTC A-65, 2001-2005.

Other experience:

Participation in International Projects

Languages Self-assessment

Russian
 Georgian
 English
 French

Computer skills and competences
 Driving license

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
Perfect	Perfect	Perfect	Perfect	Perfect
Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Intermediate	Intermediate	Intermediate	Intermediate	Intermediate

AutoCAD, LIRA-Windows, SAP2000, ETABS, GeoSlope Office, EERA, NERA, SIMQKE, SeismoArtif, XFlow, Visual Basic, etc.
 Georgian, B Category

Honours, Awards,
Fellowships, Membership of
Professional Societies

Founder and member of Georgian National Committee of Earthquake Engineering and Engineering Seismology, since 2002. Member of Geo Hazard Int. since 2010; member of Committee for development of National Annex for Eurocodes.

Some Last Publications:

1. I.Timchenko. Seismic resistance of reinforced large block buildings. Proceedings of the XI European Conference on Earthquake Engineering, Sept., 6-11, 1998, Paris, France (CD ROM edition).
2. I.Timchenko, N.Chachava, M.Lekveishvili. Planning of the Development of the City Center's Historical Territory Based on the Estimation of the Seismic Risk of its Buildings. Urban Settlements and Natural Disasters. Proc. Of VIA Region II Workshop. Ed. Emine M.Komut. 1999, pp. 78-84.
3. I.Timchenko, V.Zaalishvili. Earthquake engineering and development of practical insurance methodology in Georgia. Proceedings of the 1st international conference «The housing sector of the city of Tbilisi in the transition period: management reform and investment policy», Oct., 23-25 1999. Tbilisi, Coord. Centre Eurocity-XXI, pp. 105-112.
4. I.Timchenko, M.Otinashvili, V.Zaalishvili. Improvement of account of ground conditions in designing of seismic resistant buildings and structures. The Second international conference on earthquake hazard and seismic risk reduction. 15-21, Sept, 1998, Erevan, Armenia. p. 222.
5. I.Timchenko, T.Mukhadze. The analysis of NIS countries new seismic building codes. The Second international conference on earthquake hazard and seismic risk reduction. 15-21 Sep, 1998, Erevan, Armenia, p. 252.
6. I.Timchenko, V.Zaalishvili, N.Chachava. Seismic risk in assessment of ways of city historical center's rehabilitation. Proceedings of the 1st international conference «The housing sector of the city of Tbilisi in the transition period: management reform and investment policy», Oct., 23-25 1999. Tbilisi, Coord. Centre Eurocity-XXI, pp.101-104.
7. I.Timchenko, T. Mukhadze. Analysis of NIS countries seismic codes. Earthquake hazard and seismic risk reduction. Ed.:S.Balassanian, Cisternas, M.Melkumyan. Kluwer Academic Publishers. Dordrecht, Boston, London, 2000.
8. I.Timchenko, H.Docherty, G.Homeriki, M.Mamardashvili. Experience of reconstruction and rehabilitation of historical buildings in the downtown of Tbilisi. Proceedings of the XII World Conference on Earthquake Engineering, Jan., 2000, Auckland, New Zealand (CD ROM edition).
9. I.Timchenko, T.Mukhadze. The Analysis of New Seismic Codes of NIS Countries. Building Theory and Seismic Resistance. Tbilisi, 2000, pp. 135-140 (in Russian).
10. I.Timchenko, M.Otinashvili, V.Zaalishvili. Analysis of Ground Media Strong Motion with Usage of Digital Method. Theory & Earthquake Resistance. Proceedings of ISMEE No.1, Tbilisi, 2000, pp. 67-71 (in Georgian).
11. I.Timchenko, A.Odisharia et al. Engineering Macroseismic Investigation of the Epicentral Zone of the Dec 14, 2000 Earthquake in Tbilisi. Building Theory and Seismic Resistance, Tbilisi, 2000, pp. 189-194 (in Russian).
12. I.Timchenko, V.Zaalishvili, V.Kacharava. Strong motion instrumentation for structures of civil engineering and economical aspects of planning of territory of big cities M.Erdik et al. (eds.), Strong motion instrumentation for civil engineering structures. Kluwer Academic Publishers. 2001, pp. 593-602.
13. I.Timchenko, V.Zaalishvili, O. Kuranova, T.Zaalishvili. The tool of seismic microzonation. Patent of Russian Federation #2162613. Joint Inst. of Physics of the Earth. January 2001.
14. I.Timchenko, V.Zaalishvili, M.Otinashvili, I.Javrishvili. Calculation of nonlinear vibration of soil media using numerical FEM method of seismic microzonation. Building Theory and Seismic Resistance. No. 2, Tbilisi, 2001, pp. 67-74. (in Russian).
15. I.Timchenko. Account of soil conditions in seismic calculations of buildings and structures. Building theory and Seismic Resistance. . No.2. Tbilisi, 2001 (in Russian).
16. I.Timchenko. Seismic Vulnerability Assessment of Buildings on the Basis of Numerical Analyses. Proc. of XII ECEE, London, 2002. CD-ROM Edition. Paper No. 734.
17. I.Timchenko, T. Mukhadze. Epicentral Earthquake on April 2002, Tbilisi, Georgia: the Capital in Front of Problems. Proc. of SE-40EEE. Skopje Earthquake 40 Years of European Earthquake Engineering. Skopje-Ohrid, 2003. CD-ROM Edition, Paper No. 0143.
18. I.Timchenko, G.Lomidze, M.Otinashvili. Case Study of the April 2002 Tbilisi Earthquake: Soil Seismic Response. Proc. of SE-40EEE. Skopje Earthquake 40 Years of European Earthquake Engineering. Skopje-Ohrid, 2003. CD-ROM Edition, Paper No. 0052.
19. I.Timchenko, G.Gabrichidze, T.Mukhadze. Engineering Analysis of the 2002 Earthquake in Tbilisi. Building Theory and Earthquake Resistance No.4, Tbilisi, 2004 (in Russian), pp. 22-31.
20. I.Timchenko, G.Gabrichidze, T.Mukhadze, A.Datunashvili. Assessment of the 2002 Earthquake Intensity in Tbilisi. Building Theory and Earthquake Resistance No.4, Tbilisi, 2004 (in Russian), pp. 32-42.
21. I.Timchenko, G.Gabrichidze, T.Mukhadze. Consequences of the 2002 Epicentral Earthquake in Tbilisi. Earthquake Engineering. Safety of Structures. 2004, #1 (in Russian), pp. 56-59.
22. I.Timchenko, T.Mukhadze. Intensity of the Tbilisi, 2002 Earthquake by Seismological and Macroseismic Data. The 4th International Electronic Conference "Natural and Antropogenic Catastrophes", 2004, http://www.acnet.ge/catastrophes/l_8.htm .

23. I.Timchenko, G.Gabrichidze, T.Mukhadze. April 2002 Earthquake in Tbilisi, Georgia: Main Consequences. The 4th International Electronic Conference "Natural and Antropogenic Catastrophes", 2004, http://www.acnet.ge/catastrophes/II_4.htm.
24. I.Timchenko, Z.Javakhishvili, T.Godoladze, M.Elashvili, T.Mukhadze. The Tbilisi Earthquake of April 25, 2002 in the Context of the Seismic Hazard of the Tbilisi Urban Area. *Bolletino di Geofisica Teorica ed Applicata*, Vol. 45, N.3, pp. 169-185, September 2004.
25. I.Timchenko. Accuracy of structural modeling and seismic safety. EE-21C, *Earthquake Engineering in the 21st Century*, Skopje-Ohrid, Macedonia, August 27-September 1, 2005, Paper No. e153.
26. I.Timchenko, N.Chachava, M.Lekveishvili. Reconstruction as a tool of seismic risk mitigation in historical cities. EE-21C, *Earthquake Engineering in the 21st Century*, Skopje-Ohrid, Macedonia, August 27-September 1, 2005, Paper No. e191.
27. T.Mukhadze, I.Timchenko, L.Chanadiri. The intensity assessment of the April 25, 2002 earthquake in Tbilisi, *Journal "Building"* #7, 2007 (in Georgian).
28. I.Timchenko, J.Gigineishvili, G.Chikvaidze, D.Gigineishvili. Foundation, computer modeling and design features of the water reservoir in Salibauri. *Scientific-Technical Journal "Mshenebloba" ("Building")*, "Building", #1 (16), 2010, pp.11-16 (in Georgian).
29. I.Timchenko, T.Davitashvili. Estimation of existing tall buildings pile foundations bearing capacity under seismic and wind loads. The Seventh International Conference on Material Technologies and Modeling MMT-2012. Ariel University Center of Samaria, Ariel, Israel. August 20 - 23, 2012.
30. I.Timchenko. Calculation of artificial accelerograms for structural design of high rise buildings (Rus). "Scientific-Technical Progress in Construction & Architecture", Baku, AzIMETI 2014, pp. 97-102.
31. I.Timchenko, J.Gigineishvili, N.Intskirveli. Modern problems and application prospects of composit, including basalt-plastic for reinforcement of concrete and rehabilitation of structures (Rus). *Scientific-Technical Journal "Mshenebloba" ("Building")*, #4, 2016, pp. 6-13.
32. I.Timchenko, J.Gigineishvili. Structural and architectural design in conditions of the complex topography of Georgia.- *Proceedings of 9th international conference "Contemporary problems of architecture and construction"*. Batumi-Georgis, Sep. 13-18, 2017, pp.404-411.
33. I.Timchenko, J.Gigineishvili, D.Gigineishvili. Current problems and application prospects of different types of composite reinforcement basalt-plastic rebars for concrete and for strengthening of structures.-*Proceedings of 9th international conference "Contemporary problems of architecture and construction"*. Batumi-Georgia, Sep. 13-18, 2017, pp.397-403.
34. I.Timchenko, J.Gigineishvili, M.Chorkhauri, K.Korkia. Restoration and strengthening of structural materials using glass of basalt fiber and the SPRUT polymeric composition. *Scientific-Technical Journal "Building"*, #3 (52), 2019, pp. 15-26.