POUYA H. KHOSRAVI

CIVIL & EARTHQUAKE ENGINEER

pouya.khosravihajivand@gmail.com | Tehran, Iran

pouyakh.ir | linkedin.com/in/thisispouyakh | github.com/thisispooyakh

PROFILE

Civil and earthquake engineer (M.Sc., Shahid Beheshti University; B.Sc., Sharif University of Technology) with technical-office and site experience on hospital and petrochemical projects. Strong in ETABS and AutoCAD, with working knowledge of ACI 318 and Standard 2800. Co-author of three 2026 peer-reviewed journal papers. Seeking a structural design assistant or site execution role.

EDUCATION

M.Sc. in Earthquake Engineering | Shahid Beheshti University Sep 2024 – Jun 2026

GPA: 18.41/20 | Thesis: Computer Vision-Based Lateral Strength and Stiffness Loss Estimation for Seismically Damaged RC Columns Using Graph Theory and Machine Learning.

B.Sc. in Civil Engineering | Sharif University of Technology Feb 2021 – Jun 2024

GPA: 17.37/20

EXPERIENCE

Technical Office Expert | Abnie Rah Pejvak, Ahvaz 2021 – 2024 (part-time, ~1 year cumulative)

- Technical office role supporting the company's projects.

Site Intern, Petrochemical Project | Sarayand Sakht Parsoomash, Jofeir Summer during B.Sc. | 3 months

- Checked construction drawings, coordinated concreting of pedestals and pipe boxes, and prepared cost estimates.

Site Intern, Aria Hospital Project | Abnie Rah Pejvak, Ahvaz Summer during B.Sc. | 1 month

- Observed late-stage hospital construction activities and site coordination.

SELECTED PROJECTS

14-Story RC Building | University Design Project | ETABS, ACI 318-19, Standard 2800

- Modeled and analyzed a 14-story RC building in ETABS following ACI 318-19 and Standard 2800.

Parametric RC Frame Pushover Analysis | Python, OpenSeesPy

- Built a parametric 2D RC moment-frame generator with nonlinear fiber materials (Concrete02, Steel02); runs pushover analysis and plots base shear vs. roof drift.

Crack Graph Extractor | Python, Computer Vision, Graph Theory

- Converts photos of cracked RC columns into crack graphs and extracts 14 topology features (node/edge counts, maximum eigenvalue, etc.) for damage assessment.

PUBLICATIONS (2026, peer-reviewed)

- Performance-based machine learning-aided seismic design methodology for RC moment frames. *Bulletin of Earthquake Engineering*
- Comparative assessment of CMR in steel seismic force-resisting systems: a FEMA P-695 statistical analysis. *Interdisciplinary Journal of Civil Engineering*
- Signal processing methods for SHM of bridges: a review of classical, data-driven, and hybrid approaches. *Advances in Bridge Engineering*

TEACHING

Teaching Assistant: Structural Dynamics (Shahid Beheshti Univ.); Basics of Earthquake Engineering and Differential Equations (Sharif Univ.).

TECHNICAL SKILLS

Strong: ETABS, AutoCAD, Excel, Word, DEEPSOIL, Visual Studio

Working: OpenSees/OpenSeesPy, SeismoSignal, MS SQL Server, Photoshop, CorelDRAW, OriginLab

Codes / Programming: ACI 318-19, Standard 2800 | Python, C# (ASP.NET Core)

LANGUAGES

Persian (native) | English (TOEFL iBT 110, 2026)