

# PRABODH DAHAL, PhD, PE

Elk Grove, CA

Phone: +1 -(662) 715 9868  
Email: [prdahal1@gmail.com](mailto:prdahal1@gmail.com)

Website: [www.prdahal.com](http://www.prdahal.com)  
LinkedIn: [www.linkedin.com/in/prdahal](http://www.linkedin.com/in/prdahal)

Professional Civil Engineer with specialization in structural engineering (seismic design and analysis) honed with effective managerial, leadership and problem-solving skills, working at California Department of Transportation as a bridge engineer under seismic and special analysis (SASA) branch, and is on a track to get SE licensure.

## RELEVANT EXPERIENCES

**Bridge Engineer, Seismic and Special Analysis**, California Department of Transportation, Sacramento, CA **Mar 2021- Present**

- Structural design, analysis and retrofitting of the special bridges, specifically, seismic analysis
- Load Rating of Bridges
- Design and Analysis of Retaining Wall, Tunnel and involvement in other highway-related projects.

**Research Assistant**, UNIVERSITY OF MISSISSIPPI, Oxford, Mississippi **Aug 2016- Dec 2020**

- Research focus on stability analysis of structural systems and multi-hazard objective resilience of infrastructural facilities
- Performed **seismic design and analysis (non-linear using ABAQUS CAE)** of low, middle and high-rise, i.e., 3-,6-,9-,20-storey, steel building to investigate the effect of earthquake, post-earthquake fire and aftershock
- Examined hazard- independent stability sensitivity of steel and RC buildings (low-rise)
- Investigated effect of scour on bridge piers through analytical modeling in ABAQUS CAE
- Conducted drone-enhanced rapid visual assessment of select UM buildings (thermal imaging and point-cloud imagery)

**Civil Engineer**, WE WORLD ONLUS Nepal Branch, NEPAL **Feb 2016- July 2016**

- Accomplished the design, reconstruction, retrofitting, and maintenance of school buildings affected by Gorkha Earthquake of 2015, Nepal. (**44 Schools**- RC and Masonry Structures); adopted IS and NBC building codes and used SAP 2000 and ETABS.

**Technical Director**, SAMRIDHA NEPAL ENGINEERING SERVICES AND RESEARCH CENTER PVT. LTD., NEPAL. **Aug 2015-Aug 2016**

- Founded an engineering firm and directed its technical aspects being aligned with the prime motto- "Enhancing Quality, maintaining integrity, and prospering sustainability"; estimated turnover ~ 85 Lacs NRs. (approx. **80 k USD**).

**Structural Engineer**, DIYO NEPAL, NGO / Creative Services Pvt. Ltd., NEPAL **May 2015- July 2015**

- Supervised the design, analysis and factory set-up for the starting phase of "Interlocking Bricks Technology of Construction"

**Part Time Student Mentor**, UNIVERSAL ENGINEERING AND SCIENCE COLLEGE, NEPAL **Nov 2014-April 2015**

- Applied Mechanics, Theory of Structures, Design of Reinforced Concrete Structures

**Crash-Course Instructor**, GOODWILL ENGINEERING SOLUTIONS PRIVATE LIMITED, NEPAL **Jan 2015**

- Auto-CAD, SAP 2000

**Civil Engineer**, CADS CONSULTANCY & HYDRO-RESEARCH PVT. LTD, NEPAL **Oct 2014- April 2015**

- Responsible for the structural design including the repair, maintenance and retrofitting of RC framed and masonry buildings; worked total on **17 buildings** (3-,4-, and 5- Story)- using SAP 2000 and ETABS.

**Civil Engineering Intern**, CADS CONSULTANCY & HYDRO-RESEARCH PVT. LTD., NEPAL **Jan 2014- Aug 2014**

- Worked under the supervision of senior engineers for drafting, estimating B.O. Qs and writing technical reports including the preparation of bid documents.

## COMPETENCIES AND SOFTWARE SKILLS

- CsiBridge, ABAQUS CAE, SAP 2000, ETABS, AASHTOWARE BrDr -- (5+ years)
- AUTOCAD (7+ years), Revit (1+ year), SOLIDWORKS
- ENERCALC, RISA, PROKON, GIS, CES Edu Pack
- Hazus-MH, GIS, Civil-3D, BIM (basic)
- Python (SciPy, NumPy), MATLAB, Mathematica--(4+ years), R
- MS Office (word, excel, PowerPoint), keynote
- LateX, HTML, Web Developing
- AI and Machine Learning (Intermediate)

2018 IBC, ASCE 7-16, ANSI/AISC 341-16, ANSI/AISC 360-16, AISC 325, ACI 318-14, ACI 360R-10 and Eurocode | AASHTO LRFD, PCI

## EDUCATION

---

**Ph.D. in Engineering Science**, Civil Structural Engineering **2016-2020**  
UNIVERSITY OF MISSISSIPPI, University, Mississippi, United States  
*Dissertation: Incorporation of Post-Earthquake Fire and Subsequent Aftershock for Multi-Hazard Analysis of Steel Buildings.*  
**Bachelor's in Civil Engineering** **2010-2014**  
TRIBHUVAN UNIVERSITY, Central Campus, Pulchowk, IOE, Kathmandu, Nepal

## PROFESSIONAL REGISTRATIONS

---

**Professional Engineer, California Board**  
Category 'A' Civil Engineer – Nepal (11373- NEC registration number)

## PROFESSIONAL SOCIETY MEMEBERSHIP SERVICES

---

**American Society of Civil Engineering (ASCE)** -A.M. (ID:11302279)  
**Earthquake Engineering Research Institute (EERI)**- A.M. (ID: 19467)  
**Structural Engineering Institute (SEI)**- A.M.  
**Advisor, Nepalese Students' Association at Ole miss (NEPSA)**  
**Registered Engineer, Nepal Engineering Council** (Reg. no: 11373)

## LEADERSHIP

---

**Technical Director (Board Member)**, Samriddha Nepal Engineering Services and Research Center Pvt. Ltd., NEPAL, Est. 2015  
**Public Relation Coordinator**, 6<sup>th</sup> National Civil Engineering Exhibition cum Competition, CESS NEPAL, Dec. 2013

## HONORS AND AWARDS

---

**Student Development Grant Award** (April, 2019)- Division of Student Affairs, Ole Miss.  
**School of Engineering Award** (May 2018)-Wood Society, School of Engineering, Ole Miss.  
**Graduate School Fellowship** (May 2017 & May 2018)- Graduate School, Ole Miss  
**Graduate Assistantship** (August 2016-May 2020)- Department of Civil Engineering, Ole Miss  
**Merit Based Scholarship** (December 2010-Decemeber 2014)- IOE, Nepal