

Ashirwad Barnwal

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Professional Summary

A diligent researcher working passionately in the field of traffic safety and constantly aiming to come up with innovative solutions to help the transportation engineering fraternity in their persistent attempt to make roads safer than ever.

Education

Iowa State University

Master of Science in Civil Engineering
GPA: 4.0/4.0

Ames, Iowa

Expected May 2017

Indian Institute of Technology, Roorkee

Bachelor of Science in Civil Engineering
GPA: 7.85/10

Uttarakhand, India

July 2010 to May 2014

Research Experience

Crash Cushion Selection Criteria

Iowa State University

Ames, Iowa

Aug 2015 to present

- Developing a guideline to assist Iowa Department of Transportation (IowaDOT) engineers in selecting the most cost-effective crash cushion, a roadside treatment, to be installed on various highway scenarios differing in roadway, roadside and traffic characteristics.

Crash Severity Analysis for Roadside Crashes

Iowa State University

Ames, Iowa

Jan 2016 to April 2016

- Developed Ordered Probit Model to investigate the effect of lateral offset distance, object characteristics and other pertinent factors on the severity of injury sustained in collisions with roadside fixed objects along Interstate Highways in Iowa.

VISSIM 5.4 Parameter Calibration

Indian Institute of Technology, Madras

Chennai, India

June 2014 to Aug 2014

- Calibrated VISSIM 5.4 parameters for a Signalized Intersection at IT corridor in Chennai by comparing the actual traffic flow from field with the simulated data.

Critical Gap Estimation at an Uncontrolled Intersection

Indian Institute of Technology, Roorkee

Roorkee, India

Jan 2014 to April 2014

- Estimated the critical gap at an uncontrolled intersection for through movements from a minor road using Raff's, Harder's, Logit and Probit method for two-wheelers, three-wheelers and cars.

Software Skills

- Microsoft Office
- ArcGIS
- R Studio
- Matlab
- VISSIM

Internship & Engineering Projects

IIT Roorkee

Bachelor's Design Project

- Designed a sewage treatment plant for IIT Roorkee campus.

Uttarakhand, India

July 2013 to April 2014

Central Public Works Department (CPWD)

Summer Internship

Junior Year

- Supervised the construction of a new Supreme Court building and a utility tunnel.

Gazhiabad, India

May 2013 to June 2013

IIT Roorkee

Survey Camp

- Prepared a topographic sheet of Chandighat Area, Haridwar using plane table surveying.

Uttarakhand, India

December 2012

Gannon Dunkerley & Co Ltd. (GDCL)

Summer Internship

Sophomore Year

- Learnt the principles of structural drawing, survey work, estimation and costing while working at the 4*300 MW captive power plant.

Balco Nagar, India

May 2012 to June 2012

Extracurricular

Music Section, IIT Roorkee

- Performed as a vocalist at events organized by the Music Section.

National Cadet Corps (India)

- Underwent basic military training during 2 years of affiliation with the NCC (2010-2012) and obtained the prestigious C-Certificate.

Awards

Institute Silver Medal | Brigadier Harish Chandra Cash Prize |

Tara Chand Kanti Devi Cash Prize

- Best Design Project in Civil Engineering out of 120 students.

Roorkee, India

September, 2014

ISCMS-KSS PETRON Award

- 3rd Place in Quiz Competition based on Construction Materials & Structures.

Roorkee, India

March, 2014