# Pranjal Dhole (M.Sc.) Resume

## Personal Information

▶ Status: Research Assistant at Hochschule Bonn-Rhein-Sieg

> Fields Computer vision, Machine learning, Mathematical modelling

▶ Prefers: Python, Matlab, Git, C++

▶ Email: dhole.pranjal@gmail.com, pranjal.dhole@inf.h-brs.de



# **Employment history**

# 07.2017 - present Research Assistant

Hochschule Bonn-Rhein-Sieg

- ▶ Machine-learning-based modelling of fluid-flow around 3D shapes (Development of Vehicle Exteriors project).
- ▶ Teaching assistant for Computability and Complexity II (WS2017-18).

#### 09.2015 - 11.2016 **Doctoral Researcher**

Research Center caesar

- ▶ Development of extended 3D-geomtric eye-tracking model.
- > Skills Computer Vision, 3D modelling, machine learning

# 08.2014 - 09.2015 **Student Assistant**

Bonn-Cologne Graduate School office

- Organization of the intranet system
- assistance in administrative tasks

# 11.2013 - 03.2014 **Student Assistant**

University of Bonn

▶ Preparation of lecture notes for course 'Advanced atomic, molecular and optical physics' taught by Prof. Dr. Michael Köhl at University of Bonn during WS2013-14.

## **Education**

# O3.2016 - present Masters in Autonomous Systems

Hochschule Bonn-Rhein-Sieg

- ▶ Research and development project: I am currently involved in developing neural network-based predictive model for aerodynamic profiles of NACA airfoils.
- ➤ Computer Vision project: I am currently working on Rubik's cube detection and its pose estimation using geometric modelling.

#### 10.2012 - 08.2015 **Graduated as M.Sc. in Physics**

University of Bonn

➤ Masters thesis: Emergent Gravity and Cosmology: Thermodynamic perspective (Slides available at www.thp.uni-koeln.de/gravitation/mitarbeiter/dhole.html.)

#### 10.2012 - 08.2015 Graduated as Bachelor of science

**Christ University** 

▶ Triple major in Physics, Mathematics and Chemistry

## **Computer Skills**

Programming languages | Python, MatLab, C++, ROS.

Web development | HTML, CSS, jQuery, JavaScript.

Algebra Mathematica.

Media LATEX, Microsoft Visual Basic, Adobe Illustrator.

Operating systems | Linux, Windows.

# **Languages**

English Fluent German limited working proficiency (B1.1)

Marathi Native language Hindi Native language

#### Talks and Invited Seminars

 Masters Colloquium: 'Emergent Gravity and Cosmology: Thermodynamic Perspective', University of Bonn, May 22, 2015.

• Invited Talk - 'Emergent Gravity - Thermodynamic Perspective', BCGS Weekend Seminar at the Physikzentrum, Bad Honnef, Germany, April 19, 2015.

## Awards, Grants and Prizes

- Scholarship €6,000 in total, Stiftung caesar, for period of 6 months starting Sept., 2015.
- 2nd place in Convergence Inter-collegiate Mathematics fest 2011.
- 2nd place in Eureka Intercollegiate Physics Festival 2011.
- 3rd place in Chemicus Intercollegiate chemistry fest in crosswords (B. Sc. 5th Semester) 2011.
- 2nd place in Chemicus Intercollegiate chemistry fest in 20 questions (B. Sc. 5th Semester) 2011.
- 2nd place in Intercollegiate Mathematics Quiz (B. Sc. 3rd semester) 2010.
- 1st place in Intercollegiate Mathematics Quiz at NMKRV (B. Sc. 3rd Semester) 2010.
- 2nd place in Intra-collegiate Mathematics Quiz (B. Sc. 2nd Semester) 2010.
- 1st place in Intra-collegiate Mathematics Mega Event (B. Sc. 2nd Semester) 2010.
- 3rd place in Inter-collegiate Science Quiz (B. Sc. 1st semester) 2009.

# Reference

Dr. Idil Kokal

Managing Director, Bonn-Cologne Graduate School

Helmholtz Institut für Strahlen- und Kernphysik (HISKP)

Universität Bonn

Nussallee 14-16

D-53115 Bonn

Germany

Tel: 0228 73-4832 (office)

E-mail: ikokal@uni-bonn.de