Résumé April 8, 2019

Professor Gautam Dasgupta, Columbia University, New York, NY dasgupta@columbia.edu; DOB: October 13, 1946; Citizenship: USA

#### Education

Bengal Engineering College, Calcutta University, INDIA: Bachelor of Engineering 1967 (Civil) Master of Engineering 1969 (Applied Mechanics)

University of California, Berkeley, Doctor of Philosophy 1974 (Structural Mechanics)

# Employment

Columbia University, Asst. Prof. 1978, Assoc. Prof. 1981, Prof. 1994

University of California, Berkeley, Post-doctoral fellow 1974–77

Goa Polytechnic, Lecturer, Applied Mechanics, 1970

Technical Teachers Trainee, Applied Mechanics, 1967–70

## Guest Professorship

Technische Universität, Wien, Austria, 1982-92, Associate Professor

Bundeswahr Universitat, Hamburg, Germany, 1986-87, Associate Professor

Technische Universitat, Braunschweig, Germany, 1993-94, Professor

## Fellowship

Alexander von Humboldt Stiftung, Germany, 1986

Fulbright Senior Professorship, Washington D.C., 1998

Tsunoda Research Fellowship, Waseda University, Japan, 2017

# **Cumulative Research Funding**

National Science Foundation: \$1,187,000;

National Institutes of Health: \$300,000

Columbia University Academic Quality Fund \$270,000

## Publication

Textbook: 1 (Springer Verlag); Journal Papers: 16 (single author), 21 (joint);

## Columbia University Patent

U.S. Patent No. 6,101,450: "Stress Analysis ... Defect-Free ... Finite Element Technique"

### Consulting Experience

Bechtel Corporation, San Francisco, California, 1974-77

Weidlinger Associates, New York, NY, 1977–80

AMOCO, Tulsa, OK, 1983–87

NASA-Lewis, Probabilistic structural analysis, 1981-86

Business Advantage, Espoo, Finland, Computer Algebra, 1991-

Knowledge Solutions Group, Toyo, Japan, 1999–

### Conference Chair

Founding Chair: International Mathematica Symposium, 1995

Vice Chair: Turing Centenary Advisory Committee, 2013

#### Committee Chair and Editorship

American Society of Civil Engineers, Journal of Engineering Mechanics:

Elasticity, 1980 1985; Bioengineering, 1990 1995

#### Teaching

Continuum Mechanics (Current); Structural Mechanics and Applied Mathematics

# Activities from $1/1/2018-1/20/2019^{\dagger}$

Professor Gautam Dasgupta, dasgupta@columbia.edu

Prepared on: April 8, 2019

# with Waseda University

Columbia University Tsunoda Fellowship: Engineering Mechanics in Waseda

Research with Senior and Junior faculty members: Large scale symbolic computations

# with NYU and Tsinghua University

Project: Turing, Chomsky and Wolfram in "Computational Thinking"

# with Tsinghua University and Knowledgw Solutions Group, Tokyo

*Project:* Large Scale Optimization with Symbolic Computation

## with Osaka University, Osaka

Guest speaker at the December 2018 "Disaster Mitigation" symposium

# with Advanced Institute of Industrial Technology (AIIT), Tokyo

Guest speaker at the September 2018 "Disaster Mitigation" symposium

Tokyo Metropolitan University Public University Corporation, Asia Professional Educational Network, November 2018 meeting, Kuwala Lumpur:

'Statistics of Extremes for Natural, Industrial and Man-made Extreme Disasters'

### with Universities and Institutes in India

Birla Institute of Technology and Science, Pilani — Goa:

Guest Lecture on Computations in Engineering Mechanics Indian Statistical Institute, Kolkata

Languages for Symbolic Computations

Indian Institute of Engineering Science and Technology, Shibpur

Emergency Management and Security Engineering

# with Springer Verlag

Completing: Tensor Computations: for Physical, Cyber & Uncertain Systems

Mid stage of writing: SecurityEngineering:

Mitigating Natural, Industrial & Man-made Extreme Disasters

Final Stage of Editing: "Complex Fibonacci Series with Applications" —by A. Weierholt

Final Stage of Editing: "Computer Metalanguage with Applications" —by B. Koo

## with ASCE Elasticity Committee

Committee Member: Reviewer;

Special Lectue at the Tokyo Institute of Technology, O-okayama, Meguro-ku Tokyo:

"Analytical Computation of Exact Strains in Quadrilaterals"

Current Paper: "Large Strain Computation in Quadrilaterals"

# Commencement Speaker at AIT, Bangkok

Chief Guest for May 2018 graduation ceremony; Guest Speaker at the Commencement **Hosting Scholars** 

J. Shen, PhD student, Tsinghua University, Beijing

A. Weierholt, Prof. Mathematics, Oslo Engineering College, Oslo

Three Journal Publications with students in University of Science and Technology Beijing

<sup>&</sup>lt;sup>†</sup>Research items are fully funded by host institutes to the collaborators. On medical leave in Spring 2019.