Satyavarta Satyavarta
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EXPERIENCE

- **Facebook**, Menlo Park, CA — Jun 2014 – Present
  Quantitative Engineer, Machine Learning
  – Text analytics to derive insights from chatter, using natural language processing (NLP) techniques scaled up for size and linguistic diversity of target data.

- **Microsoft**, Bing, Bellevue, WA — Nov 2008 – Jun 2014
  Senior Software Development Engineer, Multimedia Relevance
  Previous teams: Structured Knowledge, Commerce Relevance, Front–end
  – Trained models to predict multimedia intent in Bing queries, increasing traffic to multimedia vertical by 12%
  – Developed and refined user satisfaction metrics for multimedia content on the SERP
  – Built analysis and visualization tools with demonstrated speed–up in pace of experimentation across the team
  – Shipped interactive auto–suggest for Bing Shopping in collaboration with Microsoft Research
  – Projected revenue impact of global re–routing of customer traffic in support of recommendations to executives
  – Delivered performance gains of 25% in speed, and 40% in memory usage in front–end components
  – Trained spam/junk classifiers for filtering data ingested into structured data store

- **Boston University**, Dept. of Cognitive and Neural Systems, Boston MA — Aug 2003 – Nov 2008
  Graduate Research Assistant, Auditory Neuroscience Laboratory of Prof Barbara Shinn-Cunningham
  – Created and evaluated the Cocktail Party Animal, a speech separation algorithm robust to reverberation
  – Performed information theoretic feature selection for speech separation
  – Programmed C++/SDL media player to run multiple movies simultaneously on screen with spatialized sound
  – Graduate coursework in machine learning, statistical modeling, and information theory

- **Max–Planck Institüt für Informatik**, Saarbrücken, Germany — May – July 2001
  Intern in Algorithms Group, with Dr Ulrich Meyer
  – Prototyped and evaluated an average-case linear time algorithm for Single Source Shortest Paths problem in the LEDA C++ algorithms library.

EDUCATION

- **Boston University**, Boston MA
  Master of Arts, Cognitive and Neural Systems — Jan 2013

- **Indian Institute of Technology (IIT)**, Delhi, India
  Master of Technology, Computer Science and Engineering — May 2003
  Major project: USB Stack for RTKER Real-time Operating System (RTOS)
  Bachelor of Technology, Computer Science and Engineering — May 2003
  Academic projects:
  – Set up Linux compute cluster, and analyzed performance on parallel Integer Sort benchmarks, Summer 2002
  – Developed and implemented Optimal Heterogeneous Vehicle Routing in a metro city under the competitive Summer Undergrad Research Award, 2000
  – Designed and implemented online course pre-registration system prototype, Summer 1999

SKILLS AND INTERESTS

C++, R, MATLAB, SCOPE, C#, Python, bash/CMD, some JavaScript (d3.js)

Algorithms, Machine Learning, Stochastic Processes, Scientific Visualization

AWARDS

Dean's Fellowship, Boston University, 2003 • Graduate Engineering Test (GATE) in CS&E, 98.20%ile, 2001

Summer Undergraduate Research Award, 2000 • All India Rank 179 (∼99.8%ile) for IITs, 1998

NTSE national scholarship 1996–2008