

JASON SUNDRAM

jsundram@urgrad.rochester.edu

<http://jsundram.freeshell.org>

Research and Development Skills

- Strong analytical and research skills developed through mathematics degree and research experience.
- Writing skills developed by writing program notes for the University of Rochester orchestras.
- Ability to communicate difficult concepts effectively and with clarity, developed as a math teaching assistant.
- Ability to master complex ideas quickly and with little supervision, demonstrated in work experience.
- Languages: C++, Java, PERL, Matlab, JavaScript, HTML, LaTeX, UML.

Programming, Analysis, and Research Experience

Computer Network Technologist I, University of California Santa Barbara, Santa Barbara, CA
Redesigning and programming ecological differential equation models written in Pascal into a Matlab framework.
March 2002–present

Research Associate – Computer Modeling, University of Abertay Dundee, Dundee, Scotland, UK
Developed an individual-based simulation model of interacting agents (C++/PERL/UML). Investigated the effect of individual interactions on the dynamics and diversity of the simulated communities with emphasis on understanding ecosystem complexity (Sundram et al. in preparation). June–December 2001

Mathematics Teaching Assistant, University of Rochester Mathematics Department, Rochester, NY
Created Calculus homework ("Webwork") for student use, using PERL, LaTeX and HTML (<http://webwork.math.rochester.edu>). Support for Webwork. Taught students Discrete and Continuous Mathematics, both in classes and individually. 1998–2001

Computer Drafting Technician, DeRaven Design and Drafting, Albany, NY
Created blueprints for residential houses from artist's conceptions, using AutoCAD LT 97. Configured and maintained drafting hardware and software. Summer 2000

Technical Support, University of Rochester Multimedia Center, Rochester, NY
Provided technical support for many software packages. Solved hardware and software problems on both Mac & PC computers. Answered users' questions. Created software guides. 1996–1998

Research Intern in Genetics and Physics, New York State Health Department, Albany, NY
Investigated antibiotic resistance genes in E. Coli. Used a High Voltage Electron Microscope to research structural aberrations in 'Bucky balls' (C60) and gather sensitometry data. Summers 1995–1996

Meetings and Courses

- "Disentangling Nature": A workshop on the relation between individual behavior and the function and evolution of ecosystems. SIMBIOS Centre, University of Abertay Dundee. September 27–28, 2001.
- Course: Spatial Statistics in S+: an Introduction. University of Abertay Dundee. June 19, 2001.

Education

Bachelor of Arts, Mathematics, University of Rochester, Rochester, NY. May 2001.
Major GPA 3.63/4.0. General GRE: Verbal:780; Analytical: 730; Quantitative: 790.

- National Merit Scholarship
- Rush Rhees Scholarship
- Dean's Commendation for outstanding performance in physics
- Classical Music Critic, Campus Times; annotated programs for UR symphony orchestras
- Awarded a semester's study at Oxford's Advanced Studies in England program, tuition-free.