

Georgi N. Chunev

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OBJECTIVE

Seeking a full-time summer internship that would either allow me to apply and expand my research skills in computer graphics, or would introduce me to work in computer science industry.

EDUCATION

Indiana University - Bloomington, Bloomington, IN

PhD in Computer Science May 2013

- Minor in Cognitive Science
- GPA: 3.8/4.0
- Areas of interest: Computer Graphics and Visualization

Manchester College, North Manchester, IN

Bachelor of Arts in Computer Science and Mathematics, received in May 2008

- Minor in Physics
- GPA: 3.9/4.0
- Graduated Magna cum Laude
- CS Senior Project: Learned the basics of OpenGL graphics, and analyzed various algorithms for generating solids
- Mathematics Senior Project: Studied pseudo-random number generators

INDEPENDENT STUDIES AND RESEARCH ASSISTANTSHIPS

- Research assistantship in high-dimensional geometric data visualization, Fall 2009
- Independent study in the application of virtual worlds to psychological research, *using the Wizard Virtual Reality Toolkit*, Fall 2009
- Graduate assistantship and independent study at the IU Open Systems Lab on the topic of GPU solutions for synthesizing full-resolution plenoptic camera images; my work was affiliated with Adobe Research, and is expected to contribute to a paper that is in preparation, Summer 2009
- Independent study in GPU based volume rendering and multi-wavelength astronomical data visualization, *using the OpenGL Shading Language*, Spring 2009

WORK EXPERIENCE

Indiana University Computer Science Department, *Associate Instructor*, August 2008- Present

- Grade the assignments for a graduate-level course on computer graphics; and work with students outside of class, Fall 2009
- Assisted with assigning and grading homework for a junior-level class on computer structures; and taught labs related to embedded systems programming (ARM7TDMI), Fall 2008, Spring 2009

University of Wyoming Physics and Astronomy Department, *Intern*, Summer 2007

- Collected stellar spectra using the Wyoming Infrared Observatory Long Slit Spectrograph
- Classified 24 debris disk candidate stars, and helped collecting data for other projects
- Designed a poster with research results, which was presented at the 2008 AAS meeting

Manchester College Physics Department, *Assistant*, September 2006 - May 2008

- Performed astronomical data analysis using IDL
- Reviewed astronomical observation requests using SPOT
- Coauthored a paper on the structure of IR bubbles

Manchester College Department of Math and Computer Science, Assistant, 2006 - May 2008

- Taught study tables, and weekly graded homework for lower level programming classes
- Assisted the departmental chair and provided supplies for the departmental staff

Manchester College IT Services, MicroSupport Assistant, September 2005 - May 2008

- Set-up software and hardware for the use of the college community
- Troubleshoot software problems regarding the use of Manchester College's network system

Manchester College Physics Department, Astronomy Intern, Summer 2006

- Analyzed the environment of three high-mass star formation regions, based on 2-D radiation transfer models applied to GLIMPSE and 2MASS data.
- Designed a poster with research results, which was presented at the 2007 AAS meeting

"GENY-G", Volunteer Web Designer, Summer 2005

- Designed a multi-page information website for a small Bulgarian company that deals with imported Russian health improvement products

SKILLS

Computer: C/C++, IDL, Python (wx, PyOpenGL), Scheme, Pascal, MFC, Visual Basic, GLUT/OpenGL, GLSL, basic Oracle PL/SQL, JavaScript, CSS, HTML, MIPS Assembly, ARM Assembly, VHDL, Dreamweaver, Fireworks, Photoshop, Illustrator, IRAF, Linux/Unix, Microsoft Windows, SVN;

Language: Fluent in Bulgarian and English, Intermediate German,

PUBLICATIONS

- Watson, C.; Povich M.S.; Churchwell, E.B.; Babler, B.L.; Chunev, G.C.; Hoare, M.; Indebetouw, R.; Meade, M.R.; Robitaille, T.P.; Whitney, B.A., "Infrared Dust Bubbles: Probing the Detailed Structure and Young Massive Stellar Populations of Galactic HII Regions", *ApJ*, 681, p.1341-1355 (2008)

CONFERENCE PRESENTATIONS

- Bird, Sarah; Chunev, G.; Kobulnicky, H.; Uzpen, B., "Optical Spectroscopy of GLIMPSE Stars with 8 Micron Infrared Excesses". 2008 AAS/AAPT Joint Meeting, *American Astronomical Society Meeting 211; Abstract published in the Bulletin of the American Astronomical Society, Vol. 39, p.813*
- Chunev, G.N.; Watson, C.; GLIMPSE Team, "High-Mass Star Formation in Three Southern, Galactic Cores", 2007 AAS/AAPT Joint Meeting, *American Astronomical Society Meeting 209; Abstract published in the Bulletin of the American Astronomical Society, Vol. 38, p.922*

AWARDS

2008 Manchester College Student Research Symposium,

Jo Young Switzer Award for Excellence in Writing

- Wrote a paper on "Optical Spectroscopy of GLIMPSE Stars with 8 Micron Infrared Excess", which was judged as the best example of quantitative writing by a Manchester College student.