Matthew Krupcale

Education

2010–2014 **BSE, Engineering Physics, Electrical Engineering (double major)**,
Case Western Reserve University, Cleveland, OH, *GPA: 3.91*.
Physics and electrical engineering with solid state concentration

Experience

May–Aug 2012 **Researcher & Assistant**, *Purdue University Physics*, West Lafayette, IN, Nuclear Physics.
- Configured & ran radiation detector simulator to optimize high-rate liquid noble gas scintillation detector
- Developed method for measuring and analyzing xenon/krypton gas chamber coincidence pulse data
- Presented poster at DNDO-NSF Academic Research Initiative Grantees Conference

May–Aug 2011 **Software engineer**, *BoxLogix Automation, LLC*, Cincinnati, OH, Logistics/Supply Chain.
- Developed an interface for customer relations, project and product management
- Designed solutions to integrate with proprietary warehouse control system
- Suggested ways to improve and optimize existing software

June–Aug 2008 **Engineering technician**, *Pyramid Controls, Inc.*, Cincinnati, OH, Warehousing.
- Assisted on-site with the maintenance and upgrade of a tilt-tray sorter
- Became familiar with industry-standard automation hardware and software

Skills

Operating Systems	Windows (XP/Vista/7/8), Linux (Fedora/Ubuntu)
Tools & Systems	Apache HTTP, LDAP (389 DS, OpenLDAP), RDBMS (MS SQL, PostgreSQL), Samba, CUPS
Languages	C/C++, Java, .NET (C#), Python, PHP, Perl, sed, AWK, SQL, VB6, (X)HTML, CSS, JavaScript, LaTeX, Bash
Libraries	Bullet Physics (C++), NumPy/SciPy/Matplotlib (Python)
Applications	MATLAB, Mathematica, R, Multisim, OrCAD/PSPICE, Origin, Igor Pro, Adobe (Photoshop, Premiere), Autodesk (3ds Max, AutoCAD), MS Office, Emacs, Make, Git, Doxygen
Lab Skills	Radiation measurement, error/uncertainty analysis, analog/digital oscilloscopes, multimeters, function generators
Miscellaneous	Problem solving, debugging, troubleshooting, hardware assembly

Honors & Awards

Apr 2013 **B.S. Chandrasekhar Prize**, *CWRU Undergraduate Honors*.
for superior performance by a junior physics major

2012–2014 **Junior/Senior Scholarship**, *Case Alumni Association*.

2010–2013 **Dean's List**, *Case Western Reserve University*.

2010–2014 **Provost Scholarship**, *Case Western Reserve University*.