

# JON JANELLE

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*Problem-solving enthusiast with over a decade of computer science and mathematics experience and an insatiable appetite for learning*

## Technical Skills

- Advanced knowledge of Java, Python, PHP, R, HTML5, and CSS3
- Intermediate knowledge of SQL, JavaScript, and Ruby
- Skilled in the use of the Laravel and Django MVC frameworks to create dynamic web applications
- Thorough understanding of objected-oriented design and test-driven development
- Regular user of Git and GitHub for version control and collaboration
- Active in coding competitions hosted by HackerRank, CodeFights, and ProjectEuler

## Data analysis

- Significant experience using R and Excel to clean, analyze, and visualize data
- Advanced knowledge of mathematical statistics, including Bayesian and non-parametric techniques
- Proficient in the design and maintenance of relational databases using MySQL

## Relevant Work Experience

**Central Catholic High School**, Lawrence, MA

**Sept. 2014 - June 2017**

### *Computer Science and Mathematics Teacher*

- Designed and taught curricula for AP Computer Science A in Java, Introduction to Game Design in Python, and Calculus I
- Founded a Mathematics Team and a Coding Club that encouraged more than 100 students to engage with computer science and mathematics

**The University of Maine**, Orono, ME

**Aug. 2012 - Aug. 2014**

### *Interim Assistant Director of University of Maine Research in STEM Education Center*

- Cleaned, analyzed, and visualized large data sets using R and Python
- Contributed to program evaluation reports to support the renewal of more than \$13 million in grants from the National Science Foundation
- Created a custom mail-merge system using PHP and JavaScript which more than halved mail campaign preparation time
- Automated the generation of client invoices using Python scripts to query MySQL database tables and generate PDF documents from the results

**S.W. Cole Engineering Inc.**, Bangor, ME

**Aug. 2012 - Dec. 2012**

### *Statistical Consultant*

- perform statistical analyses and visualizations of plant abundance data collected from experimental farm sites using R and Python
- Communicated statistical findings to a research team

**The University of Maine**, Orono, ME

**Sept. 2004 - May 2006**

### *Teaching Assistant and System Administrator*

- Maintained user accounts and performed system maintenance on a Unix-based server
- Efficiently processed system log data using in Python and PERL
- Designed C++ software to drive a robotic chess system to use as a demonstration during campus tours, boosting visitor interest
- Teaching assistant for a microcomputer architecture course using the Motorola HC11 processor

## Formal Education

**Harvard University Extension School**, Cambridge, MA

**A.L.M., Spring 2019**

**Concentration:** Software Engineering

**Relevant Coursework:** Computer Science Using Java I & II, Data Structures, Web Application Development, Graph Theory, Vector Mathematics, Database Systems

University of Maine, Orono, ME

M.S.T., May 2014

**Concentration:** Mathematics Education Research

**Relevant Coursework:** Statistical Methods in Education I & II, Multivariate Statistics, Bayesian Statistics, Mathematical Statistics, Statistical Methods in Research, Partial Differential Equations, Educational Psychology, Evaluation of Instruction

University of Maine, Orono, ME

B.S., May 2010

**Major:** Secondary Mathematics Education

**Relevant Coursework:** Computer Science I & II using C++, Microcomputer Architecture, x86 Assembly Programming, Digital Logic with VHDL Design, Calculus I-III, Abstract Algebra, Real Analysis, Discrete Mathematics, Differential Equations, Linear Algebra

## Other Professional Development

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Udemy Complete Web Developer Course

Oct. 2016 - Feb. 2017

- Fundamentals of client side web-development using HTML5, CSS3, Javascript, and jQuery

Coursera and John Hopkins University

June 2014 - June 2016

- Completed courses in Exploratory Data Analysis, R Programming, Statistical Inference, Mathematical Biostatistics, Regression Analysis, Computational Data Analysis, and Statistics for Public Health