

# Nicholas Baillon

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## Education

**Bridgewater State University, Bridgewater, MA**

May 2020

Bachelor of Science, graduated *summa cum laude*. GPA: 3.9

- Primary Major: **Computer Science**
- Secondary Major: **Mathematics**
- Minor: **Statistics**

## Honors and Awards

Pi Mu Epsilon. National mathematics honor society.

April 2019

ROSE Scholarship. Specific to BSU, full tuition and fees paid.

2016-2020

## Computer Skills

<b>Operating Systems:</b>	Windows (95, 98, XP, Vista, 7, 8, 8.1, 10), Linux (Ubuntu), Mac (OSX)
<b>Languages:</b>	C, C++, F#, Java (Swing, Android), Prolog, Python, R, Swift, x86 Assembly
<b>Web Development:</b>	HTML, CSS, JavaScript, JQuery, AJAX
<b>Databases:</b>	PostgreSQL, SQLite, MongoDB
<b>IDEs:</b>	Eclipse, JetBrains (PyCharm), R Studio, SAS, Visual Studio
<b>Text Editors:</b>	Notepad, Notepad++, Visual Studio Code
<b>Version Control:</b>	Heroku, GitHub, GitKraken, Sourcetree
<b>Other Software:</b>	MS Office (Excel, Word, etc.), OpenOffice, GIMP, Audacity, VirtualBox, WireShark

## Programming Knowledge

- Familiar with the Functional, Logical, Object-Oriented, and Procedural paradigms and their applications.
- Experience using statistical software, including R, R Studio, and SAS.
- Capable of using Git software to coordinate version control.
- Proficient in multiple programming languages with varying syntax.
- Able to work and communicate effectively in team environment on projects with deadline.

## Computer Science and Related Course Work

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| <ul style="list-style-type: none"><li>• Cybersecurity &amp; Computer Networks</li><li>• Cryptology</li><li>• Web Application Development</li><li>• Discrete Mathematics</li><li>• Data Structures and Algorithms</li><li>• Analysis of Algorithms</li></ul> | <ul style="list-style-type: none"><li>• Mobile App Development</li><li>• Object-Oriented Software Engineering</li><li>• Operating Systems</li><li>• Organization of Programming Languages</li><li>• Senior Design and Development</li><li>• Computer Organization</li></ul> |
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## Statistical Course Work

- Probability Theory
- Regression Analysis
- Statistical Methods I and II

## Other Mathematical Course Work

- Linear Algebra, Abstract Algebra
- Multivariable Calculus
- Real Analysis

## Projects

- **C++ Text Adventure.** Created Zork-like game. Text parsing achieved with verb+noun system, with multiple menu layers. Implemented abstract classes, inheritance and other OOP principles.
- **Chatroom Website.** Allows users to register and send text messages in chat to all users or a single specified user. User information and settings stored in PSQL database. Uploaded to Heroku.
- **x86 Assembly Breakout.** Designed graphical, real-time game. Defined location of blocks, speed of ball and keyboard inputs for movement of paddle.
- **RSA Encryption Scheme.** Used the extended Euclidean algorithm and relatively prime numbers in modulus to encrypt and decrypt messages by hand.