

# Hilary Mallar

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## SUMMARY

Full-stack web developer and experienced verification engineer with debug and problem-solving skills. Established self-starter with attention to detail and organization. Grasps new concepts quickly and efficiently.

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## TECHNICAL SKILLS

React, React Native, JavaScript, HTML, CSS, Bootstrap, Java, jQuery, Node, Express, MySQL, Sequelize, MongoDB, Responsive Design, APIs, JSON, Firebase, Git, Heroku, LaTeX

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## PROJECTS

**Unpopular Baby** | [github.com/hgmallar/uncommonBaby](https://github.com/hgmallar/uncommonBaby) | <https://www.unpopularbaby.com/> |

<https://play.google.com/store/apps/details?id=com.unpopularbabyapp>

*Search for names using popularity by decade and/or letter placements.*

- Created SQL database with SSA data of name and popularity by decade.
- Created backend API to serve Android mobile app.
- Coded using React, React Native, Chart.js, SQL, Sequelize, Node, Express, HTML, CSS, and JavaScript. Uses Bootstrap, Font Awesome and Google Fonts styling. Mobile responsive.

**Youth Rally** | [github.com/hgmallar/youth-rally](https://github.com/hgmallar/youth-rally) | <https://www.youthrally.org/>

*Informative website and custom store for non-profit organization, The Youth Rally, Inc.*

- Coded using React, HTML, CSS, and JavaScript. Uses Bootstrap, Font Awesome, and Google Fonts styling. Mobile responsive.

**Integer Tiles** | <https://github.com/hgmallar/integerTilesWeb> | <https://www.integertiles.com> |

<https://play.google.com/store/apps/details?id=com.integertiles>

*Practice integer operations with virtual manipulatives.*

- Coded using React, React Native, HTML, CSS, and JavaScript.

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## EXPERIENCE

**Math Editor** – *Kabir's Prep* – Remote

**2020 - Present**

Created and edited preparatory materials for SAT, ACT, and MCAT exams.

*Key Accomplishments:*

- Created diagrams, graphs, and equations using LaTeX.

**Full Stack Web Development Bootcamp Teaching Assistant** – *Trilogy Ed* – UNC Chapel Hill, Raleigh, NC **2019 - 2020**

Assisted students in learning web development.

*Key Accomplishments:*

- Supported students in their projects and challenges.
- Provided feedback on assignments.

**Math Editor** – *Aztec Software* – Remote

**2015 - 2020**

Created and edited supplemental materials for web application of preparatory materials for high school equivalency exams. Interfaced with software team to fix bugs. Fielded customer content and software questions.

*Key Accomplishments:*

- Communicated effectively to remote team and took on extra work to help meet deadlines.
- Implemented new technology solutions to make the team more efficient.

**Math and Computer Science Teacher – *The Bronx High School of Science* – Bronx, NY**

**2009 - 2013**

Taught Geometry, Precalculus, and Computer Science Projects. Created unit and lesson plans emphasizing real-world problems and applications. Integrated technology into the classroom.

*Key Accomplishments:*

- Mentored and advised the all-female FIRST FRC Robotics Team, the FeMaidens.
- Collaborated with colleagues to establish best practices and curriculum maps that integrated the Common Core Standards.

**Hardware Verification Engineer – *IBM* – Poughkeepsie, NY**

**2002 - 2008**

Verified processor chip logic designs through random unit and element level simulation. Debugged test case failures and analyzed results. Problem solved to maximize coverage statistics. Programmed simulation environment using C, C++, and Perl.

*Key Accomplishments:*

- Led a multi-site unit hardware verification team through project completion.

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**EDUCATION**

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**University of North Carolina, Chapel Hill, NC – Full Stack Web Development Bootcamp**

**Bard College, Annandale-on-Hudson, NY – Master of Arts in Teaching Secondary Mathematics Education**

North Carolina Out of State Initial Educator License (2016)

New York State Secondary Mathematics Professional Teaching Certificate (2012)

**Syracuse University, Syracuse, NY – Bachelor of Science Electrical Engineering**

Minors in Mathematics and Engineering Management