

# Mark Makowski

704 e 31st St  
Erie, PA 16504

724.882.4690  
mark.a.makowski@gmail.com  
in/mark-makowski

Professionally, I specialize in Full Stack Development, particularly frontend development, with a focus on user interaction and system analysis. My expertise includes front and backend web development, game development, Android and iOS app development, and later implementation, and deployment with a focus in developing intuitive, responsive, and user-oriented interfaces and interactions.

In the classroom, I prioritize an empathetic, informative, and student-focused environment that promotes learning applicable in future professional settings. I strive to promote these values in professional and business settings beyond education, believing that teams who foster teamwork, empathy, and effective communication are more likely to succeed.

Beyond technical development, I excel in technological project management and business communication. My role often bridges the gap between technical teams and business professionals, ensuring projects align with strategic objectives and are efficiently delivered. Continuous communication and agile decision-making between stakeholders, developers, and business teams are paramount to effective planning, anticipating challenges, and informed decision-making.

## EDUCATION

### Master of Business Administration

*Erie, PA - Class of Summer 2021, GPA 3.7*

*Penn State Erie, The Behrend College*

- Assisted and taught Management Information Systems (MIS) as a Graduate Teaching assistant and full stack web developer to ensure effortless web development for the students of Penn State while earning my MBA

### Bachelor of Humanities in Digital Media, Arts, and Technology

*Erie, PA - Class of Fall 2018, GPA 3.5*

*Penn State Erie, The Behrend College – Magna Cum Laude*

- Interned at PartnershipErie while concurrently completing an IT-related degree and achieving Dean's List
- **Senior Projects:** developed a LAMP stack Flask web application to automate watermarking users' photographs, designed and created a social network web application for local nonprofit organizations, and historically researched and composed an academic-level dissertation on artificial intelligence
- Triangle Fraternity Alumni: An organization of scientists and engineers that value development and the highest standards of personal integrity and character

## EXPERIENCE

### Adjunct Professor of Management Information Systems (MIS)

*Erie, PA - January 2022 – Present*

*Penn State Erie, The Behrend College*

- Developed a senior-level, collegiate Python Data analytics course, including course syllabi, readings, assignments, and lesson plans of the fundamentals of data analytics and machine learning in Python to establish a baseline of data analytics programming, integration, and Big Data literacy at Penn State Behrend
- Facilitated engaging classroom discussions and practical Python programming exercises while providing constructive feedback and guidance to promote a learning environment of positivity and academic growth and development
- Created and concurrently taught Python data visualization using common data analytics libraries such as Pandas, Numpy, Matplotlib, PyPlot, Apache Hadoop and Spark

### Full-Stack Web Developer

*Erie & Tarentum, PA - August 2018-Present*

*Self-Employed / Contracted*

- Developed an eCommerce platform to promote and sell medical products during the COVID pandemic, resulting in more than \$150,000 in revenue from online sales in our first year of business
- Maintain existing web presences of small business and non-profit organizations to ensure businesses can achieve a larger reach by utilizing online resources and optimizing Search Engine Optimization (SEO)
- Communicate with clients for easy integration of new technologies in their existing workflows, that client needs are being met, and all completed within a timely manner

### Staff Engineer

*Erie, PA - January 2022 – April 2023*

*Whitethorn Games*

- Developed and published a commercial 3D construction application in Unity to promote a new industry standard of effortless project planning, management, and estimates with the use of 3D modeling and sketching solutions in a 3D environment
- Gained hands-on experience in professional-level video game development and publishing, C#, Unity programming and certifications, code maintenance, version control, and business communication with a diverse, remote-based team
- Managed programming tasks and self-taught training to ensure deadlines are met in timely and effective manner
- Created interactive environments and user interfaces in Unity and C# to provide more accessible solutions to all users

## Full Stack Developer

Pittsburgh, PA - June 2021- Dec. 2021

Troutwood

- Designed, developed, researched, and tested a Django RESTful API to interact and perform CRUD operations with an React Native EXPO frontend or Apple iOS/Android app, utilizing Amazon Web Services S3 (AWS Amplify) for storage, and deployed via Heroku
- Developed a React Native EXPO iOS financial planning multiplayer game using python Channel's WebSockets and Google Cloud / Firebase API
- Created a mobile financial analysis classification platform to promote user-friendly financial wellness and decision-making
- Assisted in publishing two React Native-based mobile financial education applications to the iOS App Store

## Full-Stack Web Developer / Greener Behrend Support Staff

Erie, PA - June 2018 – June 2021

Partnership-Erie / Greener Behrend Support Staff - Penn State Erie, The Behrend College

- Designed and construct adaptive and responsive web applications utilizing a LAMP stack programming environment
- Advanced the web influence of local nonprofit organizations while creating fluid and responsive websites, designs, and front and back-end web-based enterprise solutions to suit the organization's needs
- Managed and trained undergraduate interns in the process of professional, project management, and enterprise web design and development while gaining hands-on communication, art, and programming experience
- Researched, developed, and tested PHP Social Engine Content Management System (CMS) web applications and plugins to promote user donations and provide financial planning value to users

## Advanced Repair Agent

Erie & Tarentum, PA - August 2013-August 2020

Geek Squad Precinct #597

- Received 3 promotions over course of career due to a combination of a strong customer service skillset and computer aptitude that was developed as a high school student and progressed into an understanding of greater, comprehensive electronics
- Ability to fully understand and market technical plans of customers' needs to achieve and surpass daily quotas
- Achieved daily goals of effectively using time, demonstrate value over cost, and connect with the public as an effective sales and repair strategy
- Serviced multiple sectors of the Best Buy Stores, and exceled greatly in quick and quality service

## ACCUMULATED SKILLS

---

- **Programming / Languages:** Python, HTML5/CSS, SQL, PHP, Java, Lua, NoSQL, Bash, C++, C#, Visual Basic, React Native, JavaScript, JSON, XML, Unity, Unreal Engine, Amazon Web Services (AWS) S3
- **Frameworks:** Bootstrap, Flask, Git, SocialEngine PHP, WordPress, Wix, Django, EXPO React Native, REST API, Unity
- **Database Management:** System Analysis, MySQL, Data Warehousing, MarkLogic NoSQL, SQLite, Google Firebase, Django REST API
- **Data Visualization & Analysis:** Tableau, IBM SPSS, Palisade StatTools/DecisionTools, Python Visualization (Pandas, Numpy, MatPlotLib, PyPlot), Natural Language Processing and Microsoft Excel
- **Environments:** Linux/Unix, Windows, Mac/OSX, Android, Apple iOS, Nintendo Switch (Game Porting)
- **Web Design:** Design, Wireframing, user interaction and interface (UX / UI), Logo design, integration, Adobe Creative Cloud
- **Business Administration:** organizational ethics audits, cognitive behavioral management and analysis, market tracking, corporate financial analysis, supply chain management, corporate social behavior (CSR), sustainability practices, effective negotiation techniques, and effective decision-making processes

## NOTABLE ACHIEVEMENTS

---

**Eagle Scout** - Laurel Highlands BSA District

Pittsburgh, PA - June 2014

- Orchestrated strong leadership, organization, and efficiency skills through leading a team and obtaining required materials to revitalize a community park in a 900+ total hours service project
- Part of the 160,000+ member National Eagle Scout Organization focusing on providing networking, connections, personal improvement, and growth Eagle Scouts
- Completed 21 required merit badges pertaining to: First Aid, Citizenship, Communication, Cooking, Lifesaving, and more