THOMAS K. CARSELLO

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EDUCATION

PURDUE UNIVERSITY, West Lafayette, IN   *August 2021 – Present*
- B.S. Computer Science with minors in Mathematics and Business Management
- Expected early graduation in December, 2024 (3.5 years)
- GPA: 3.9 / 4.0
- Coursework: Data Structures & Algorithms, Algorithms Design, Operating Systems, Computer Architecture, Cloud Computing

PROFESSIONAL EXPERIENCE

CROWE LLP, *Technical Consulting Intern | Software Developer,* Chicago, IL   *May 2023 – Present*
- Collaborated with the design and implementation team to develop, test, and deploy bespoke software solutions through object-oriented programming and relational database technologies, optimizing data management and driving efficient system performance
- Participated in requirement gathering sessions to support senior consultants in translating specific business needs into functional and technical specifications for customized cloud-based ERP systems
- Supported the prototyping phase and solicited client feedback to improve the functionality and usability of custom features within software solutions for public sector clients, including public utilities, airports, and seaports
- Selected to extend internship program throughout the school year with expanded software development responsibilities

PURDUE UNIVERSITY, *Undergraduate Teaching Assistant,* West Lafayette, IN   *August 2023 – Present*
- Selected by an Associate Professor of Practice of Computer Science to serve as a teaching assistant for Systems Programming, a core curriculum course of over 200 students
- Attended multiple weekly lab sessions, hosted office hours, and monitored the course's online forum to clarify concepts related to systems programming, provide constructive feedback on students' code, and answer administrative questions
- Collaborated closely with the professor, course coordinator, and fellow teaching assistants to maintain consistent grading standards and provide constructive feedback to students

PRIME COMMUNICATIONS LP, *Business Systems Intern,* Houston, TX (remote)   *May 2022 – August 2022*
- Implemented software solutions to streamline retail sales data analysis for Prime Communications – AT&T's largest authorized wireless retailer with over 2,000 stores across North America
- Designed and developed Python automation solutions leveraging frameworks such as Pandas, OpenPyXL, and Selenium
- Performed ad-hoc analyses and field research for operational committee meetings supporting the Vice President of Business Systems

PROJECTS

SCHEDULE MANAGER
- Led a four-member scrum development team to design and implement a product targeting fast food and retail businesses to manage employee shift scheduling, task delegation, and communications
- Implemented a REST API via Express.js to connect backend services to frontend functionality
- Utilized the MERN tech-stack (MongoDB, Express.js, React.js, Node.js) to implement a scalable full-stack web application

BUCKET TASKS
- Designed and developed a full-stack web application for users to organize upcoming tasks into buckets, providing an easy-to-use interface for managing tasks and displaying productivity metrics
- Implemented a REST API with Express.js to manage CRUD operations on a MySQL database adhering to Boyce-Codd normalization
- Deployed in the AWS Cloud via Docker containers on AWS Elastic Container Service (ECS)

PERSONAL WEBSITE
- Developed a static website to showcase personal projects and professional experience through a reactive, user-friendly web interface
- Deployed static HTML, CSS, and JavaScript content through AWS CloudFront CDN and S3 Object Storage

LIVE MULTIPLAYER CHESS
- Implemented a Java application allowing remote users to play real-time games of chess over a network
- Leveraged object-oriented and multi-threading techniques to maintain TCP/IP socket connections between client and server processes

ACTIVITIES

PURDUE HACKERS
- Placed 6th out of 74 divisional contestants in the 2023 HammerWars 2.0 programming competition sponsored by Deloitte and AWS
- Attend events with sponsors and peers to grow networks and to gain insights from panel discussions and workshops

ACM PURDUE
- Participate in a collaborative environment focused on building software and exploring technologies through special interest groups
- Attend events and weekly workshops within the application development special interest group (SIGAPP) to explore full-stack web development frameworks and scalable cloud backends

SKILLS
- Languages and Frameworks: Java, C#, Python, JavaScript, C++, C, SQL, React.js, Node.js, Express.js, MongoDB, Git, Docker, Bash
- Technical Expertise: Software Design Patterns, Database Design, Cloud-Native Design, Data Structures & Algorithms, Agile, DevOps