

NICHOLAS GOLLNICK

Madison, WI • nicholasgollnick7@gmail.com • 262-490-5009
nicholasgollnick.com • github.com/nicholasgollnick7 • linkedin.com/in/nicholas-gollnick

EDUCATION

University of Wisconsin–Madison **Madison, WI**
Bachelor of Science in Computer Science Expected May 2028

Relevant Coursework: Artificial Intelligence, Introduction to Computer Engineering, Data Structures, Algorithms

EXPERIENCE

NASA Johnson Space Center **Houston, TX**
Software Engineering Intern, ER3 HumanWorks Lab June 2025 – August 2025

- Revived a decade-old powered knee dynamometer and interfaced it with Unity over serial, working from eight-year-old documentation to write Python CLI routines for parameter flashing, fault recovery, homing, and range-of-motion capture.
- Built Comet Kicker, a Unity 3D exergame turning astronaut resistance training on the dynamometer into a field-goal kicking game with physics-based ball flight, four scoring modes, authenticated accounts, and per-mode leaderboards.
- Ran playtests with lab peers and mentors, then reworked the aiming system, added an instruction screen, and flattened the difficulty curve based on what testers struggled with.
- Piped Whoop wearable biometrics into an InfluxDB time-series store to build per-crew-member health profiles, and proposed daily grip strength as a recovery marker that the lab adopted and added to the pipeline.
- Wrote the setup and troubleshooting guide the lab uses to bring the dynamometer online with Unity, covering the install sequence, homing procedure, and known failure modes.

Detailing Delivered **Oconomowoc, WI**
Co-Founder and Software Engineer May 2023 – August 2026

- Designed and built a full-stack booking and operations platform on Next.js, TypeScript, Prisma, Supabase, and Stripe, replacing the site builder the business ran on.
- Wrote a pricing engine that computes each quote from vehicle class and four vehicle-condition inputs and applies bundle discounts automatically, and a scheduler that ranks open appointment slots by the marginal drive time each adds to the day's existing route.
- Integrated Stripe across one-time bookings, invoices, gift cards, and recurring membership billing, routing failed charges to an admin queue instead of letting them fail silently.
- Built recurring membership and referral programs, with anniversary auto-rebooking and referral credit granted on job completion rather than at checkout so codes could not be farmed.
- Enforced role-based access with server-side field stripping so employee accounts never receive revenue or payroll data, and built the admin dashboard covering scheduling, CRM, invoicing, payroll, and analytics.
- Ran the business to roughly \$10,000 in monthly revenue on the prior site; hired and trained the crew and wrote the operating procedures they run on.

Freelance Web Development **Madison, WI**
Independent Developer 2026 – Present

- Build production sites for owner-operated service businesses on Next.js 15, React, TypeScript, Tailwind CSS, and Vercel.
- Took a client running on word of mouth with no brand or web presence to a full business identity: logo, color palette, structured service offerings, FAQ, and the site to run it on.
- Handle scoping and discovery directly with owners, and hand off hosting and repository ownership to the client at launch.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Java, C#, Python, SQL, HTML/CSS

Frameworks and Libraries: React, Next.js, Node.js, Tailwind CSS, Prisma, Unity

Platforms and Tools: PostgreSQL, Supabase, Stripe, Twilio, Google Maps Platform, Vercel, InfluxDB, Git