

JOSHUA SCHMIDT

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EDUCATION	Stevens Institute of Technology , Hoboken, NJ <i>Bachelors of Engineering</i> , Computer Engineering <i>Minor</i> , Computer Science, <i>Dean's List</i> May, 2021	GPA: 3.99/4
TECHNICAL SKILLS	Languages: Java, Python, Golang, C++, C, VHDL, Javascript/Typescript, Dart Databases: MongoDB, Redis, Elasticsearch, Postgres, SQLite Cloud: GCP, AWS, DigitalOcean Tools/Frameworks: Git, GraphQL, REST, Linux, Flutter, ROS, IoT, Node.js, Springboot, Vue.js, React.js, Docker, Maven+Gradle, Firebase, BeautifulSoup, WebRTC, Serverless, ARM-v8, FPGA, Kubernetes, MQTT	
EXPERIENCE	Nokia Bell Labs – Robotics Development Internship May '19 - Aug '19 • <i>Swerve Drive Robot</i> : Updated fully autonomous swerve drive robot platform to work on ROS. Required substantial changes in hardware and software, as robot needed new motorcontrollers, motors, microprocessor, and compatible kinematics software for the new drivetrain. • Integrated drivetrain control software into ROS stack, with accurate odometry (feedback) from encoder, lidar, computer vision and imu data. Modularity added for easy modification and experimentation, with ability to hot-swap sensors and end effectors. Used Python, C++, ROS L3 Technologies – Software Engineering Internship Jan '19 - May '19 • <i>ANTX demo</i> : Created new drivers for RT2200a and Vortex radios. Interfaced with PRC117 and Cisco wifi router to send network traffic and monitor data throughput. Used this data to dynamically adjust network data, including a p2p video stream (WebRTC) and text chat (udp). Simulated network jamming and throttling, dynamically changing frequency and band. Used Java, Vue.js, Node.js, Springboot • <i>AACN development</i> : Agile product development for managing radio systems. Created interfaces to legacy codebase, created Docker containers for production environment, added websocket notification system, and implemented put commands endpoint in device manager. Used Docker, Java, UDP + TCP sockets, Gradle, Springboot Colgate Palmolive – Google IT Internship May '18 - Aug '18 • <i>Workflow Responsive Web App</i> : Designed and created webapp for employees to implement their custom workflows – forms with approval chains – such as travel expenses, work-orders, surveys. Deployed using Firebase database, hosting, serverless functions, storage, using jQuery and Vue.js for UI. • <i>Daily Directory Update + Active Drive Audit</i> : Developed software to update Google Directory with latest information from HR, (employee name, email, etc). Created logging program for Google Drive data, flagging suspect users, with email alerts. Used Google admin and reports apis, mailjet, app engine, Kubernetes, Golang, Jenkins	
AWARDS	• <i>First Place - Unix World Challenge '19</i> • <i>Nokia Bell Labs Innovation Award '19</i> • <i>Finalist - NASA SUITS '19</i> • <i>Third Place - Stevens Healthtech Hackathon '18</i> • <i>Fake News challenge - YHacks '18</i> • <i>First Place - Boston Hacks '17</i>	
RELEVANT COURSES	• Data Structures • Algorithms • Information Systems Engineering • Microprocessor Systems • Image Processing and Coding	
ACTIVITIES	• team leader NASA Suits, '19-'20 • Treasurer, Ultimate Frisbee • co-founder, Rescribe	