

# BULENT YESILYURT

(732) 395-1738 | bulentil1752@gmail.com | [bulent-yesilyurt.vercel.app](https://bulent-yesilyurt.vercel.app) | <https://www.linkedin.com/in/bulentyes/>

## EDUCATION

### UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)

*Bachelor of Science, Computer Science, GPA: 3.7*

Los Angeles, CA

*Expected June 2026*

- **Relevant Coursework:** Data Structures and Algorithms, Operating Systems, Programming Languages, Software Construction, Computer Networks, Computer Security, Computer Architecture, Deep Learning, Compiler Construction, Stochastic Processes, Linear Algebra
- **Clubs/Organizations:** ACM Cyber, Infinite Finance, Undergraduate Math Society

## WORK EXPERIENCE

### PRUDENTIAL FINANCIAL

*Software Engineer Intern*

Newark, NJ

*June 2025 - August 2025*

- Hardened **Python middleware for OAuth 2.0** (authorization code and client credentials) with token validation and end-to-end pytest coverage, **enhancing reliability for ~42%** of enterprise API interactions
- Built an **encryption/decryption SDK in Java** backed by HashiCorp Vault (Transform & Transit engines) to facilitate at-rest and in-transit data protection across backend services
- Collaborated with different frontend teams to create a **TypeScript caching library** that synchronized shared state across multiple microfrontends in the main application, **reducing data fetches and accelerating page load times by 35%**

### 2SIGMASCHOOL

*Software Engineer Intern*

Remote

*June 2024 - September 2024*

- Designed and developed a **browser-based Python IDE** in React using Pyodide to safely execute user code and render plots **from 15+ Python libraries**, enabling high school students across the country to learn Python directly in the browser
- Eliminated UI blocking using three dedicated Web Workers and a lightweight virtual DOM prototype, **improving run latency by 50%** to boost classroom usability
- **Authored a custom Python 'graphics' library** enabling in-browser drawing and game loops, expanding curriculum coverage
- **Began contributing to Pyodide's open-source project**, improving its runtime stability for browser-based Python execution

### KOMMU

*Software Consultant*

Remote

*December 2023 - February 2024*

- Built **full-stack authentication** for web (React, Node) and iOS (Swift, MVVM), supporting email/password and **phone-based SSO**
- Introduced JWT-based access and refresh tokens, **reducing account retrieval time by 80%**
- Optimized Firebase data access and indexing, **lowering read counts by 40%** and improving perceived load times

## PERSONAL EXPERIENCE AND PROJECTS

### UCLA Computer Security and Privacy Lab | C/C++ | Java | JavaScript | Frida/Ghidra

*Student Researcher*

*June 2025 - Present*

- Contributed to **BadUnboxing (Google Research)**, extending its unpacking framework with detection of native Dex loading, leading to broader coverage of Android packers
- Led research into uniform unpacker design through developing Frida JavaScript scripts to hook onto **dlopen** calls, evading anti-debugging checks and enabling dynamic analysis of obfuscated apps
- Investigated native library behavior in Android packers through **Ghidra decompilation of C/C++ binaries**

### 2ndPulse | Flutter | Firebase Cloud (GCP) | Swift | AWS Lambda

*CTO and Co-founder*

*June 2024 - June 2025*

- Selected for **Telora Fellowship from 900+ applicants (acceptance rate <1%) and raised \$40k**
- **Built and launched an iOS app** in Flutter leveraging Firebase to aggregate and unify user connections from LinkedIn, Gmail, WhatsApp, and other platforms into a single application
- Developed the backend **using Firebase Firestore** for account and connection cloud storage, **AWS Lambda** for automated web scraping, and **Firebase Cloud Functions** for real-time notifications

### TxtEdit | C | tree-sitter | Python | MCP

*May 2025 - Present*

- Developed a performant text editor in C with tree-sitter-powered syntax highlighting and dynamic editing
- Engineered a **Trie-based autocomplete feature with O(1) lookups** and optimized row-buffer management, **enhancing edit latency by 40% on 1k+ line files**
- Integrated **agentic editing capabilities via the Claude API in Python** to facilitate natural-language assisted edits

### TravelBrain | React.js/Node.js | JavaScript | MongoDB

*April 2023 - May 2023*

- Built a **tailored travel recommender** which considers user travel preferences to suggest travel itineraries, **submitted to LA Hacks 2023**
- Leveraged MERN(**MongoDB, Express.js, React/Node.js**) as the tech stack, **OpenAI API** to generate travel itineraries, and **Google Maps API** to suggest the shortest path between all locations in itinerary
- Supported **persistent storage** of past plans and employed **custom authentication**, enabling **100+ saved trips** and seamless user re-access

## TECHNICAL SKILLS AND INTERESTS

**Languages & Dev Tools:** Python, C++, JavaScript, Java, HTML, CSS, C, Swift, Markdown, Bash, Postman, Emacs, VS (Code), Git, GDB, GNU

**Technologies/Frameworks:** MongoDB, Firebase, AWS, React.js, Node.js, Selenium, Docker, Webpack, Flutter, Linux (Arch, Ubuntu), Frida

**Personal Skills & Interests:** Problem Solving, Teamwork, Attention to detail, Soccer, Biking, Cooking, Stanley Kubrick movies, Meeting founders