

**Benjamin Joel Cropley**  
42 Cedarland Crescent  
Nottingham  
NG16 1AH  
Tel: 07539 366 905  
E-mail: [benjamin.cropley@gmail.com](mailto:benjamin.cropley@gmail.com)

## **Personal Summary**

I am a seasoned professional with natural leadership skills and varied experience that performs well under pressure. I have worked within the telecommunications industry for 13 years. I have worked on wide scope of projects, including unified communications, major migrations, bespoke development, wholesale, call centre solutions, business environment, migrations and more general telco infrastructures.

I take great pride in the projects I undertake and ensure others within my teams feel the same, I'm trusted by stakeholders and considered an expert with regards to VoIP and other telephony technologies by my peers.

I'm a leader, at heart. And for me, I'm loyal to those in my team first and the business second. Because it's them that will fulfil our collective goals.

## **Professional History**

### ***Solutions Architect - Fuze***

***January 2019 - present***

Solved problems that didn't fit into other parts of the business. Such as..

- Delivery within countries where PSTN connectivity isn't currently established.
- Designing and providing training to colleagues and other departments
- Scoping out bespoke developments that utilised the off the shelf solutions in unique ways
- Hand-held customer during scoping exercises with the aim of providing appropriate documentation (e.g... HLD... LLD...) to facilitate delivery.
- Assisted Product organisation with the development of their roadmap.

### ***Solutions Consultant - 8x8 Ltd***

***July 2018 - December 2018***

Managed migration of large (~1000 and higher) environments from legacy infrastructure to a VoIP environment, in a position of 'technical authority' to provide confidence to the wider project organisation and customer base.

- Stakeholder management to the wider Programme teams
- Technical discovery and subsequent advisory for legacy phono infrastructure (e.g. Siemens ISDX hardware)
- Demonstrated technical credibility to the customer base
- Resource management
- High Level and low level Design documentation
- Workshops and discovery sessions

### ***VoIP Specialist - Voxygen Ltd.***

***June 2017 to June 2018***

Voxygen build telephony solutions that integrate directly into the core of t1 Mobile Networks in the UK, typically for end users in some aspect of the finance industry (Banks... Traders...)

For the following projects, I identified requirements based on customer insight and independent market research. I also architected and built the products and managed them through to release. I owned and defined the ongoing roadmap and assisted other departments in their support of the product.

- Design and build a solution that allows end-users to securely record phone calls by entering a sequence of DTMF in the middle of a mobile phone calls. It utilised both FreeSWITCH (including ESL) and the SBC, Kamailio.
- Design and build a solution that initiates playback of audio file only to a party calling into a customer, to inform them of relevant 'Data Protection Regulations'. Solution would only inform the user once during lifetime of their calling.
- Design and build a DISA solution that allows secure usage based on a combination of custom SIP headers and DTMF based security.
- Design and build a system for financial industry, that adheres to relevant standards (such as GDPR) to record phone calls and SMS data.
- Redesigned SBC implementation to incorporate load balancing, registrar, security (e.g. DoS mitigation, ACLs, whitelisting) and toll fraud protection.

*Technologies Used:*

Python, VoIP(SIP), Kamailio, FreeSWITCH, ODBC(MySQL, PostgreSQL), Unix(Ubuntu), Twisted and Puppet

***Head of Voice Architecture - Entanet Ltd (contract)***

***January 2016 to May 2017***

Entanet are one of the few ISPs in the UK with a network directly integrated with the BT core infrastructure. With this they provide competitive internet connectivity solutions and are also actively development their voice offerings.

*Projects*

- Designed and developed a backend and frontend for a hosted unified communications platform. Provided direction to a team of 12 software developers (7 C++, 5 PHP, Perl and Python) in the form of design briefs, reference material and as a technical reference. £3mil budget. Included requirement analysis via workshops and interviews, production of Project Initiation Documentation and business case, managed expenditure and financial reports to stakeholders, advised on GUI, creating and managing timelines, defining and allocating objectives, handling technical and design issues as they arose, producing documentation production and training, worked through entire development lifecycle (requirements, design, implement, testing, documentation) and conducted Quality Assurance through customer interviews.
- Owned the voice roadmap for the business.
- Built interconnects with multiple tier 1 carriers.

*Technologies Used:*

C++, Perl, PHP, Python, VoIP(SIP), OpenSIPS, FreeSWITCH, ODBC(MySQL, MsSQL, PostgreSQL), Unix(Debian), Windows Server 2012, Microsoft Project and TSAPI.

***Voice Specialist Pre-sales - GCI Communications Ltd. (contract)  
November 2015 to January 2016***

GCI provide a wide range of technical services. This included internet, voice and server solutions.

Delivered the Presales function in accordance with the overall business and team objectives. Worked on RFIs, RFPs and tenders in general. Provided support to sales in a technical capacity during demo's and presentations. Ensured offerings were both profitable and good value to customers. Designed and developed quality solutions that met customer's technical and service requirements and were commercially compelling. Ensured Sales, Marketing and Product Management received the technical & sales support required.

***Senior Technical Architect - Airefibre Ltd. (Contract)  
February 2015 to November 2015***

Airefibre provide specialist internet connectivity services to remote locations in the UK.

***Projects***

- Design training program to raise the standard of delivery engineers. Then conduct training and assess subsequent ability.
- Design and project manage end-to-end development of backend and frontend for a cloud hosting offering with 4 software developers (2 C++, 2 JavaScript and Python). Budget of £1mil. Included requirement analysis via workshops and interviews, production of Project Initiation Documentation, managed expenditure and financial reports to stakeholders, design of back end infrastructure and advised on GUI, team member management, creating timelines, allocating objectives, handling issues as they arose, managing documentation production and training, defined and managed people through all stages in development lifecycle (requirements, design, implement, testing, documentation) and Quality Assurance through customer interviews.
- Manage the delivery of complex contracts as they arose. Valued between £100k to £1mil. Included requirement analysis, timeline design and objective allocation, managing issues if they arose, managing delivery engineers and suppliers.

***Technologies Used:***

C++, Python, JavaScript, VoIP(SIP), OpenSIPS, FreeSWITCH, ODBC(MySQL), MongoDB and Unix(CentOS)

***Telecommunications Specialist (Contract)  
October 2014 to February 2015***

Next PLC are one of the UK's largest businesses, grossing billions of pounds each year. They also have a large internal IT structure which supports their 700 stores and over 3,000 staff at the head office.

***Projects***

- Project managed the deployment of a new voice infrastructure to over 3,000 devices and across 700 stores. Budget of £3mil. Requirement analysis through interviews with internal stakeholders and department management, Project Initiation Documentation, timeline design and objective allocation, managing team members through deployment, communicating with suppliers, co-ordinating deliveries with the stores, handling issues as they arose, training and documentation.

- Discovered a means of saving up to £4mil a year with a renovation to their SMS delivery method. I was asked to put together Project Initiation Documentation, timeline design and potential objective allocation, consultation with supplier and requirement analysis via interviews with senior stakeholders.

*Technologies Used:*

Bespoke scripting language for proprietary software, VoIP(SIP), Perl, ODBC(MySQL) and Unix(CentOS).

***Technical Director and Head of Voice Architecture - Jenero Ltd  
July 2013 to October 2014***

Jenero sold bespoke software to the call centre industry. Jenero was a business I founded and ultimately took on a senior technical role in the business.

*Projects*

- Complete redesign and build of the entire product offering. It was initially built by an off-shore team and hadn't scaled well as the business grew. Budget was £14mil. Included research and development and production of Project Initiation Documentation, design of all infrastructures and all GUIs, business case production, taking on architect responsibilities on behalf of 10 software developers (4 C++, 4 PHP and Python, 2 JavaScript), 4 support engineers and 2 server admins, ongoing requirement analysis via customer workshops and interviews, stakeholder management and status reports, budget management, orchestrated the software development lifecycle stages ensuring architecture briefs were adhered to and problems dealt with as they arose, quality assurance throughout all development, oversaw documentation production and training.

*Technologies Used:*

C++, Perl, PHP, Python, JavaScript, VoIP(SIP), OpenSIPS, FreeSWITCH, ODBC(MySQL,MsSQL,PostgreSQL), Unix(Debian,CentOS), Windows Server 2008/2012 and Microsoft Project.

***Voice Systems Architect - Development and Infrastructure - Cloudaire Limited  
November 2012 to June 2013***

Cloudaire provide voice services to over 30 large international clients and specialist internet connectivity solutions to remote UK businesses.

*Projects*

- Project managed the complete redesign and delivery of the entire product offering. It was initially built by an off-shore team and hadn't scaled well as the business grew. Budget was £2mil. Included research and development and production of Project Initiation Documentation, design of all infrastructures and all GUIs, business case production, team management of 10 software developers (all C++ and JavaScript), 4 support engineers and 2 server admins), ongoing requirement analysis via customer workshops and interviews, stakeholder management and status reports, budget management, managed the software development lifecycle stages, quality assurance throughout all development, oversaw documentation production and training.

*Technologies Used:*

C++, JavaScript, VoIP(SIP), OpenSIPS, FreeSWITCH, ODBC(MySQL,MsSQL,PostgreSQL), Unix(Debian,CentOS), Windows Server 2008 and Microsoft Project

***Project Manager and VoIP Architect - Development and Infrastructure - Inunet Ltd.  
October 2012 to February 2013***

Inunet sold call centre solutions, such as predictive diallers and a hosted PBX using Asterisk as its foundation. My role was to ensure the end engineers adequately understood staple concepts in telecommunications in the work place. Such as ACD, ASR, IVR and advanced diagnosis techniques.

#### *Projects*

- Conduct technical training for other engineers within the business
- Project managed the complete redesign and delivery of the entire voice product offering. It was initially built by an off-shore team and hadn't scaled well as the business grew. Budget was £0.5mil. Included research and development and production of Project Initiation Documentation, design of all infrastructures and all GUIs, business case production, team management of 10 software developers (4 C++ and 6 Perl, Python and JavaScript), 2 support engineers and 1 server admins), ongoing requirement analysis via customer workshops and interviews, stakeholder management and status reports, budget management, managed the software development lifecycle stages, quality assurance throughout all development, oversaw documentation production and training.

#### *Technologies Used:*

C++, Perl, PHP, Python, JavaScript, VoIP(SIP), OpenSIPS, FreeSWITCH, ODBC(PostgreSQL), Unix(CentOS), Windows Server 2008 and Microsoft Project.

#### ***Voice Systems Architect - Hybrid Broadband / Onwave UK (Contractor)***

***Jan 2012 to August 2012***

Onwave offer ISP services, as well as added benefits such as hosted server capacity, hosted software (i.e. managed exchange servers) and hosted telephony.

#### *Projects*

- Project managed the design and production of the voice architecture used to support 100s of end users. Budget £4mil. Included requirement analysis via customer workshops and stakeholder interviews, project timeline design and objective allocation, team management (1 Perl developer and 2 system administrators), oversaw delivery and handled issues as they arose and acted as a subject matter expert with regards to telecommunications.

#### *Technologies Used:*

Perl, VoIP(SIP), Sonus, MsSQL, Windows Server 2008, Microsoft Project

#### ***Voice Development Specialist - North Supply Ltd***

***Feb 2011 to Jan 2012***

North Supply are one of the primary suppliers of bespoke software and hardware to the largest telecommunications companies in the UK. Every one of these bespoke requirements was treated as a project.

#### *Projects*

- As a bespoke software and hardware provider the projects were numerous and different. But one example involved the development of a call recording platform to be used by one of Germany's largest call recording companies with many 1000 customers. Included PID, timeline design and object allocation, team management of 20+ software developers (wide variety of languages included C++, C, JavaScript and Perl), depending on the project, 1 system administrator), design of all infrastructures and all GUIs, business case production, ongoing requirement analysis via customer workshops and interviews, stakeholder management and status reports, budget management, managed the software development lifecycle

stages, quality assurance throughout all development, oversaw documentation production and training.

- Project managed a project that covered how North Supply could act as BTs only phone system pre-install warehouse. This involved personally producing software (both a front-end and back end infrastructure) to automatically install images to over 50 phone systems a day per requirements inputted by engineers. I also designed the process which the business followed to have a phone system delivered to customers and was a part of the timeline design, objective allocation and handled issues as they arose.

***2<sup>ND</sup> Line Support Engineer (April 2008 - Dec 2009) Delivery Manager (Jan 2010 to Jan 2011) - Magnetic North Software Ltd.***

Worked closely with a project manager to oversee the technical requirement gathering, documentation and delivery of bespoke voice products to end-users.

I worked underneath a project manager and completed their objectives. I reported back on completion of the objective.

As I grew I became involved with managing delivery of products, including production of timelines, objective allocation, team member management and requirement analysis.

***Voice Delivery Engineer - Inunet Ltd.  
June 2005 to Jan 2008***

My responsibility was to write technical objectives based off the requirements specified by a senior Project Manager.

**Education**

*The Lancaster School*

1999 - 2004

GCSE Maths, English and Science B

GCSE Music A

GCSE History A

GCSE IT A

GCSE Resistant Materials B

GCSE Physical Education B